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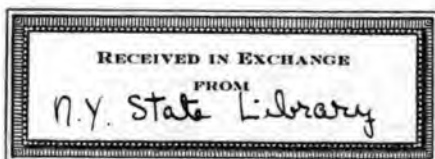
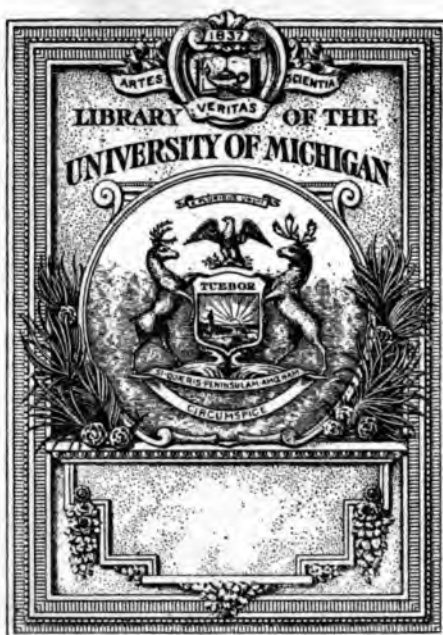
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Original Communications.

FRACTURE AND CONCUSSION (CONTRE-COUP) OF THE TEMPORAL BONE AS A CAUSE OF DEAFNESS.

BY LAURENCE TURNBULL, M. D., Philadelphia, Pa.

WITH REPORT OF CASE AND AN ILLUSTRATION.

THE temporal bone is one of the most important in the ear in its relation to deafness. If it be injured or diseased, it usually involves not only its outer surface, but also the inner wall of the tympanic cavity or middle ear, the mastoid process, and also the internal ear. It is true that we have removed the outer table of the temporal bone in children, the periosteum destroyed by necrosis or caries, or portions of the same in adults, but which, in most cases, was followed by permanent deafness on that side. It is an established fact that the vessels of the diploë of the temporal bone freely communicate with the sinuses in the cranial cavity.

Tucker Randt injected a substance (in the presence of Politzer) into the diploë of the mastoid process, and of the pyramidal portion of the petrous bone, which at once entered into the sinuses of the brain. It has also been found that three-fourths of the abscesses of the brain are in the temporo-sphenoidal lobes.

Fracture of this bone from gun-shot is almost always followed by a profound deafness of one side, but more rarely by *contre-coup* of the other side. A very severe blow on one side will at times be recovered from.

The following is the statement of the case I now present, in a letter from the surgeon, Dr. D. P. Miller, of Huntingdon, Pa.

I take the liberty of asking your opinion of the following case, and whether or not you think it can be benefited:

On January 18, 1889, a boy, aged thirteen years, was struck on the left side of the head by an engine, and the skull fractured near the top. The fracture involved the frontal and parietal bones, but not the temporal. I was called to the case and found the bones detached from the membrane and muscles of the scalp.

I removed the bone, which left an opening in the skull larger than a silver dollar. The wound healed kindly, but from the date of *injury the boy has been perfectly deaf*. I do not think there is any injury to the membrane of the ear, and I am disposed to attribute the deafness to the injury of the nerve, but as this is the first case of the kind I have ever met with, and am not familiar with such cases, I may be mistaken. I have had four (4) cases of fracture of the skull, where I removed the bone, with three perfect recoveries, but this is the first case of resulting deafness.

As the case was rare we examined all the authorities on this subject, and found the following reported :

The only mention of fracture of the parietal bone alone in connection with deafness is by Mossakoroski, who found among 1,415 wounded French prisoners but fourteen wounds of the bony parts of the head. Of this number the forehead was the seat of the injury in one case, *the parietal bones* in ten, and the temporal in three cases. In four of the cases severe cerebral symptoms developed, and in four of them hemorrhage from the ear occurred. Objective examination showed that of these fourteen invalids, four were deaf in one ear, whilst two were deaf in both ears, with severe psychical disturbance. Special aural examinations of these patients were apparently not made. [Mossakoroski, Paul. *Deutsche Zeitschrift für Chirurgie, Band 1, 1872.*]

Desiring a more detailed account of the accident, *contre-coup* of the temporal bone, the following was received from the father and engineer :

On the 18th day of January, David Louder, the young boy who, accompanied by his father, paid you a visit on the 22d of the present month, was struck by the hand-railing of a tender on the back end of a locomotive. He was picked up and carried about 100 feet to his residence in an unconscious state, and remained so until the following Tuesday. After regaining consciousness he could hear for two days, after which and up to the present time he has remained entirely deaf.

The engineer made the following statement:

In regard to the accident to the boy that was brought to you on the 22d inst., I would state that I am of the opinion that there is a bar, with which our engine is equipped for the purpose of a hand hold for the men on the rear end of the tank, having a ball on the end one and one-half or two inches in diameter; this I think struck the boy on the head. I could not say for

certain, as I knew nothing of the accident at the time. I would also state that I think I was running at the time about twelve or fourteen miles per hour.

In answer to the Doctor's letter, I stated :

Could you get a photograph of your patient (injury)? And also enter into a little more detail as to measurements, as some of the most vital points are not quite clear, but sufficient has been stated to ground a *most unfavorable prognosis*. There has no doubt been a fracture of one temporal (petrous portion) bone and concussion (contre-coup) hemorrhage on the other



FIG. 1. CASE OF FRACTURE OF FRONTAL AND PARIETAL BONE, WITH MEASUREMENTS, AFTER RECOVERY.

From a tin-type.

side. If the boy was here, an examination would be in order, but as he is not it would not be worth while. Examine for a cicatrix in the membrana tympani; also see if the umbo or bright spot be sunken or lost. Test his hearing with voice, tuning fork, and loud whistle, and two books struck together with force, and write me again.

The following reply was received :

Yours received this A. M. This afternoon the boy called at my office and I had the enclosed tin-type taken. See Fig. The paper pasted on the head is located on that portion of the head from where I removed the bone, but in taking the picture the head is reversed, the wound being on the *left side*, as in picture.

You will notice a line drawn from the ear (when attached) to upper part of Fig. From this line to the back of the wound in the skull it is one and one-quarter inches. From the base line to top of wound is two and one-quarter inches. I tried to make figures giving distances on the plate, but they were not very distinct, but perhaps you may be able to make them out. For details, see picture. Fig. 1.

I had a very poor light to-day to examine the ear, but on a former examination thought the membrane in the right ear was not injured, but was not positive as regards the left membrane. He could hear the clapping of books a distance of seven feet with left ear and fifteen feet with right ear, but was unable to hear watch tick when pressed against the ear, or on the mastoid process, or held between the teeth, and was also unable to hear a shrill bone whistle, such as hunters use in calling their dogs at long distance. When within a few inches of the ear could not hear it. I thought it very remarkable that he could hear the books when struck together, when he could not hear the whistle.

I answered as follows :

Yours of the third received ; also the tin-type. The case has received my most careful attention, as well as my son's. I can see no reason for changing our opinion. The concussion of the book was no doubt felt, as there can be no hearing power left, we fear. Keep a careful record of temperature, pulse, heart, and condition of secretions. Give him every night while in bed a hypodermic injection of first one-twentieth of a grain of the hydrochlorate of pilocarpine, for five days, then double it ; two tablets for five days, or one-tenth of a grain ; and then one-eighth of a grain for five days every other night ; then you can further increase the dose.

The patient must be carefully watched ; weakness, excessive salivation, palpitation, throbbing, giddiness, and impaired vision are indications for the lessening of the dose, or suspending the treatment, or the use of atropia if certain dangerous symptoms do not disappear. This is the antidote and is antagonistic to the pilocarpine. If no improvement is apparent, the course may be prolonged for six weeks or longer intervals. Keep also particulars of date, symptoms, etc., not mentioned before. I forgot to mention to you that my son, Dr. C. S. Turnbull, has seen in the German hospital, of this city, two or three cases in which the head (temporal region) was squeezed between two solid bodies, and in all the cases deafness was profound and was not benefited by treatment. Borrow a tuning fork from some musician and test the hearing in the air ; then over the temporal bone, mastoid, nape of the neck, occipital, and bridge of nose. This is the safest test. It may

be felt, but unless there be auditory nerve-power no musical tone can be heard.

The boy was sent to me and the following examination and diagnosis made of the case :

DIAGNOSTIC TABLE.

April 22, 1889.		Name, David Louder. Age, 14 years.	Occupation, in shoe factory. Residence, 1419 Pennstreet, Huntingdon, Pennsylvania.	
Duration.		Origin and probable cause.	No pain.	Subjective sounds.
History Left.	January 18th. Three months.	Suddenly after 4 days. Trauma.		Singing.
	Left.	Bone conduction. Diminished. Disappeared. Negative.	Air conduction. Diminished. Disappeared. Negative.	
Right. Meatus Normal.	Membrana Tympanii.	Hearing distance before, and after air douche nil.	Bone conduction on Mastoid process and with Tuning Fork.	
Adherent, Not movable, No Light cone. Hammer handle not seen. Right M. tympani curvature irregular.		Use of Politzer air douche. No improvement in hearing.	Absent.	Absent.
Light cone. Color normal. Hammer handle seen. Left M. tympani curvature sunken.			Absent.	
			Only in teeth.	
Nostrils:	Left, Normal.		Right, Normal.	
MECHANICAL AIDS: The most powerful hearing trumpet, with no sound, also Seigle's apparatus and		Politzer's method, Catheterization.	THERAPEUTICS: Pilocarpine, Ether vapor.	

The little patient came April 22d, and I devoted all my morning to him, (see table) as well as sending him to Dr. Charles S. Turnbull, and also, for fear anything was omitted, I sent him to my chief assistant at my Clinic at Jefferson College Hospital. I procured the most powerful ear trumpet made, and had him tested

with it. I opened the Eustachian tube and then introduced the catheter and injected the vapor of ether into the middle ear, testing the left ear which has had a central perforation, and found both free.

There is evidence of adhesion and deposit of blood in posterior surface of the right drum. Both my son and myself think that there must have been double fracture, or fracture on one side and *contre-coup* (concussion) on the other.

I instructed as follows :

Now, I want you to do three things : fit and insert a gum-tube in the right meatus, and then fit a syringe to it and exhaust carefully each day for a short time (one week) as you see in my book, termed "Seigle's apparatus." Also place him on the pilocarpine, as I have before directed. If no good results follow, touch his system by mercury and iodide of potassium. After all this is done I will be satisfied. He must be sent after a few months, in the Winter, to a deaf-mute school if he continues as deaf as he is, for unless this is done he will lose his power of expressing himself by spoken language, and at home he must only use lip-teaching ; no signs, if possible. Tell his father to cut off his moustache, so that he can see the action of his lips and mouth.

The noise of the book was no doubt *felt*, as there can be no hearing power left.

Abstract of doctor's letter :

After our patient returned from the city he had an abscess form in the right ear which discharged very freely, and for a time was quite painful. This prevented my treating the ear as you suggested, but have gotten through with the "Seigle method ;" used pilocarpine from one-twentieth up to one-eighth grain.

The bowels have been moved three and four times a day, and the urine largely increased in quantity. The action on the skin is not at all free, as it appears to exert its influence principally on the kidneys. The morning temperature is lower than normal, ninety-seven and two-fifths, and the evening temperature slightly increased, ninety-nine and two-fifths and ninety-nine and four-fifths degrees.

He will increase the injection to one-tenth grain, and subsequently to one-eighth of a grain from May 16th to June 3d.

There was no improvement in the hearing by this careful treatment.

1502 WALNUT STREET.

[NOTE.—This paper was prepared for the Nashville meeting (1890) of the American Medical Association, but too late for presentation there.—EDITOR.]

THE SURGICAL TREATMENT OF EFFUSIONS INTO THE THORAX.¹

By JOSEPH HOFFMAN, M. D., Philadelphia, Pa.,

Fellow of the American Association of Obstetricians and Gynecologists.

IN SEROUS effusions into the thoracic cavity, we must consider ourselves on the border line, where medicines may be considered inferior to surgery or instrumental assistance, in freeing an important viscus from the burden of external pressure. The logic of early interference in abdominal effusions, where all the viscera having to do with the functions of organic growth and nutrition are subjected to harmful pressure, is so readily perceived and so generally accepted, that when I was requested by the secretary of this section to offer a paper before it, it seemed a fitting place to discuss a subject that, though generally conceded as belonging to medicine proper, more fitly pertains to surgery.

The question is all the more open to consideration from a surgical standpoint, inasmuch as when there is an effusion of whatever character of any considerable amount into the neighboring abdominal cavity, medicine is used only as an adjunct to its surgical removal, not as a primary agent. Why the dividing line of the diaphragm should justify and make orthodox such totally variant modes of treatment, is not easily, if at all, explained. Let it be understood from the beginning that the advocacy of early, or, if you please, prompt puncture in thoracic effusions, is in no wise urged as original or new. It is only sought here to discuss this treatment comparatively, with that now established to be most successful in the peritoneal cavity, in which parallel disease is frequently found, both acute and chronic.

So far as etiology is concerned, peritonitis and pleuritis frequently trace their origin to common causes. Both may originate in cold. Both have pyemia prominently to be considered in a causal relation, as are local abscesses, and nephritis and traumatism. In analogous diseases, each with so many common factors, is there a logic or plausible explanation even for such divergent methods of treatment?

But if there are so many factors common in these two effusions into the two principal vital cavities, the brain excepted, (in which it is notable that aspiration is the only recognized method of relieving fluid pressure in its ventricles,) it is to be remarked that the effect

1. Read by title at the forty-first annual meeting of the American Medical Association, in Nashville, Tenn., May, 1900.

of all these several factors, pathologically considered, is identical. They all destroy life by interfering with the vital processes in the same manner.

The same is true, of course, of all disease, but here in each there is both a physical or vital exhaustion and a mechanical exhaustion by pressure; so that we not only have a depressed vitality owing to the disease proper, but an interference with the mechanics of organic life as regulated by ordinary physical laws controlling the diffusion of gases, hydrostatic pressure, and frictional resistance. The same conclusion can be reached as to other diseases affecting these serous membranes, and the same reasoning applied to pericardial effusions. In peritonitis of puerperal origin it was formerly the custom to allow the patient to die, with her abdomen covered with poultices and filled with pus, under the idea that an existing trouble would be made much worse by interfering with it. In pleurisy there is no doubt the dread that interference by puncture may increase an inflammation already established, or convert a serous into a purulent effusion.

Such reasoning is just as fallacious in effusions of the chest as in those of the abdomen and pelvic cavity. Where there has been an inflammatory action set up, a new inflammatory process is hard to establish. In abdominal cases in which operation is done to remove pus, it is notable that the dangers of subsequent peritonitis are almost *nil*, if a clean operation is done. The patient does not *get* peritonitis, because she already had it, and interference is made to cure it.

Now, by analogy, the same state of affairs ought to obtain in the pleural cavity, and in reality it does. It has been long ago shown by the French clinicians [Castiaux, Moutard-Martin, Wedal,] that early puncture in thoracic affections is followed by no evil after-effects, but on the contrary the duration of the attack is abridged. It has also been conclusively shown that the existence of fever is no contra-indication of the operation, just as in the abdominal lesion where the peritoneum is cleansed to cure the fever. The fact that in every effusion leucocytes are present, is suggestive of a causal relation between the fluid and the fever. It is also ably argued by Formad, from an enormous post-mortem experience, that pleuritis frequently causes tuberculosis, and that even a moderate effusion after the subsidence of fever is a troublesome and dangerous foreign element, likely to yield perilous complications and results. With these pathological facts before us it would

seem, in the light of the manifestly good operative results in the surgically allied affections of the peritoneal cavity, that the theory of delay is really not a logical one here, but a remnant of tradition, or perhaps a superstitious faith in the efficacy of drugs. In debilitated conditions incident to existing pleurisy, depletory medication can hardly fail to increase the exhaustion; for salines and their analogues, after all, act on purely mechanical principles, and remove the effusion from the thorax by disarranging the hydrostatic balance, and producing an outward flux at a sacrifice of intestinal nutrition through irritant depletion. This criticism of medical depletion, of course, cannot apply where there is congestion of the portal system in hepatic disease, or to the use of pilocarpine or jaborandi, in effusions due to nephritis. Here, on the one hand, medication acts mechanically to assist an overtaxed organ, and on the other has really a curative effect by temporarily taking the strain from the congested kidneys.

Now, in addition to the mechanical effects of effusion upon the lungs, it must be remembered that the effects of compression are not limited to these organs alone. The heart suffers, and consequently the general circulation. There is venous stagnation, and diminished urinary secretion. The harmful influences at work upon the lungs are those of pressure, diminished vitality, elasticity, the production of adhesions, false membranes and of localized pneumonia. Why, therefore, should any considerable amount of fluid, endangering a necessary vital structure in these respects, be allowed to accumulate under the idea of the danger of interference, which could not possibly be greater than the dangers of non-interference? If, then, there is an effusion evidently not inclined to disperse, causing at the same time venous congestion, difficult respiration or cyanosis, the teachings of all surgical interference for like effusions into the abdominal cavity point to direct abstraction, without delay or blind trust in the powers of nature, which, while they may seem to be equal to the emergency, are as often overtaxed and thus give place for subsequent and more serious lung disease.

But if this reasoning is true in simple effusions, it is all the more to be adopted in empyema. Indeed, the lines between the two forms of the disease are often so illy determined, that in doubtful cases, if for no other reason, aspiration is necessary to determine the nature of the fluid. More than a few cases of effusion are considered simple, until aspiration reveals the fact that they are puru-

lent. Early puncture in simple cases would be justified from this standpoint alone, were there no other advantages attending it.

Toussaint's cases show the value of early aspiration in pleurisy:
4 deaths in 176 cases operated on between 1st and 20th day.

6	"	"	80	"	"	"	"	20th	"	60th	"
1	"	"	7	"	"	"	"	60th	"	120th	"

With such a showing as this, the folly of waiting for a late date to do an operation which is in itself simple and safe, but which grows more dangerous as it is delayed, becomes more apparent. A procedure which is efficient at an early day is of more than doubtful value when deferred. It is said that hope deferred maketh the heart sick, but here an operation from which primarily much is to be hoped, later on can promise nothing unless failure, which is not attributable to the operation, but to the conditions which are met when it is performed.

The record of delay in the treatment of suppurative pleuritis is one burdened with complications and mortality. The value of early puncture, if in suspicious cases only, needs no urging, but from the single fact that empyema may exist and give no signs, apart from that of ordinary effusion.

Indeed, remedies may seem to control the effusion and tonics to benefit the patient, when suddenly there is exacerbation of the symptoms, followed by collapse and death in a short time. The lesion in these cases has resulted in gangrene of the lung, either from pressure or necrotic changes from simple purulent irritation, or from deficient nutrition of any origin whatever. With such complications as these, are we to wait for heart involvement, or pulmonary edema in the remaining sound lung tissue, before prompt surgical interference is resorted to?

The lamentable failures of medicaments here would be ludicrous if not so disastrous. Pot. iodide and tr. of digitalis are urged and with stimulants and tonics, only to give a spurious strength and a delusive hope.

The heart is oppressed without by the effusion and within by the digitalis, until, broken by its double labors, it grows weaker, while the gasping, cyanotic patient lives, an enigma unsolved and unscored by an ignorance as profound as its faith is wild. This is a strong picture, but not exaggerated. While the text-books dwell only upon the expediency of aspiration in empyema, they are stopping short of the limit wherein safety lies. The performance is not to be regarded as a simple expedient, but as a *necessity*. There is

nothing before it — nothing short of it — nothing but it. If there is doubt, so much the more is it to be urged; for the doubt is removed, and by it one of two fluids, either of which is harmful, differing only in degree.

A pint of fluid removed, clearly and entirely, is far better outside the thorax, be it pus or serum.

This is a direct teaching of abdominal surgery, whose truth is daily confirmed. Pus anywhere within the body is less dangerous by reason of an operation to remove it.

Aspiration, if insufficient by one puncture, is to be replaced by subsequent more radical procedure. By this we come to the question, what shall the treatment be? Various procedures have been urged — simple drainage, double puncture with drainage, trephining and resection.

In exceptional cases an extensive resection may be necessary, just as in simple cases the simplest form of drainage may be efficient. I incline to the belief that as an average procedure, readily to be accomplished by the general practitioner with average surgical knowledge, trephining will be the most satisfactory operation, both for results and facility of performance, for the following reasons: 1st. If two openings are made into the thorax, the entrances will be large enough easily to admit a drainage-tube of sufficient caliber to wash out the thorax. 2d. Generally these openings will be large enough to give time for cicatrization — granulation of the empyemic membrane before they close. 3d. The openings, while large enough for cleansing purposes, are not so large as to give trouble in dressing, such as must be present, to a greater or less extent, when an extensive resection is made.

With such an opening, a drainage-tube is easily introduced and kept clean, simple antiseptic precaution, without elaboration, being all that is required. I am strongly of the opinion that in these operations the use of corrosive antiseptics, for the prevention of putridity or acrid and offensive discharges, is more necessary than in abdominal operations.

So far as washes (intra-thoracic) are concerned, I doubt much whether they are to be urged as necessary, save in offensive discharges. The exception to this is iodine, which seems well deserving of credit for an influence in hastening a healthy, or a non-suppurative tendency in the pleura.

The washings are to be more regarded as an efficient means of keeping the drainage-tube and passage clean than as having any

curative effect upon the tissues, and are never harmful if of sufficiently high temperature to prevent shock. The surgical details of the operation need not be here considered.

126 WEST DIAMOND STREET.

STATISTICAL AND CLINICAL REPORT OF THREE HUNDRED CONSECUTIVE CASES OF LABOR.¹

By HENRY C. BUSWELL. M. D., Buffalo, N. Y.

THE following report embraces my obstetrical work since I began practice, about two years ago :

PRESENTATIONS.

Single deliveries : Occipito-læva-anterior, 217, or $72\frac{1}{2}$ per cent. ; occipito-dextra-anterior, 21, or 7 per cent. ; occipito-dextra-posterior, beginning and terminating as such, 7, or $2\frac{1}{2}$ per cent. ; occipito-dextra-posterior, changing to occipito-dextra-anterior, 14, or $4\frac{2}{3}$ per cent. ; occipito-læva-posterior, 1, or $\frac{1}{3}$ of 1 per cent. ; breech, 8 cases, or $2\frac{2}{3}$ per cent. ; vertex (exact presentation not determined), 28 cases, or $9\frac{1}{2}$ per cent.

Multiple deliveries : Case 64, primipara, age 26 : First child, sacro-dextra-anterior ; second child, occipito-læva-anterior. A single placenta with two cords. The amniotic sac was divided by a membranous partition, so that each child had a separate sac.

Case 91, multipara, age 32 : First child, occipito-læva-anterior ; second child, occipito-dextra-anterior. Each child contained in separate sac, with distinct and separate placentæ. Father's sister, mother, and grandmother had all borne twins.

Case 126, primipara, age 36 : Membranes of first child ruptured on Monday evening, but child not born until Saturday morning. First child, occipito-dextra-anterior ; second child, occipito-læva-anterior. Long forceps to deliver both. Single placenta with double sac ; placenta adherent.

Case 180, multipara, age 27 : First child, occipito-læva-anterior ; second child, occipito-dextra-anterior. Weight : boy, 9 pounds 4 ounces ; girl, 8 pounds. Large double placenta and sac.

Totals : Primiparæ, 96 ; multiparæ, 204. Children born alive, 287 ; dead, 13. Sex of single deliveries : males, 170 ; females, 126. Sex of multiple deliveries : males, 2 ; females, 6.

1. Read before the Buffalo Obstetrical Society, June 24, 1890.

BREECH PRESENTATIONS.

Primiparæ, 4; multiparæ, 4. In six cases the presentation was sacro-dextra-anterior; in one sacro-læva-anterior; and in one the presentation was not determined.

Four children were born alive; two were dead and macerated when born; one was born dead at the eighth month; one, before referred to as the case in which the presentation was not determined, was attended by a midwife, and when seen by me the body of the child was born and child dead. Forceps were applied and head extracted, the occiput being anterior.

In case of the presentation sacro-læva-anterior, the mother had had seven previous deliveries, several with the use of forceps, and only three living children. I applied forceps as soon as the body was delivered, but quite an amount of force was used in extracting the head, and the child was dead.

FORCEPS.

I have used the forceps forty-six times, or once in six and one-half cases. Short forceps, twenty-four times; long forceps, twenty-two times; seven times in medium operations, and fifteen times in high operations.

Case 121, primipara, 26: Called at three A. M.; applied forceps at seven P. M. After one hour and no progress, Dr. Lothrop was called in consultation. He was unable to lock Tarnier's forceps, but applied White's, and after powerful traction long continued, a dead baby was delivered. Bi-parietal diameter of baby's head, measured with pelvimeter, was four and one-eighth inches.

Case 129, multipara: Applied long forceps, on account of prolapse of cord, but child born dead.

Case 197, multipara: Has had several dead-born children, said to have been of unusual size. Slow labor; applied short forceps and easily delivered head, but could not extract shoulders until the child was dead. Largest child ever seen by me; was unable to obtain weight, but length was twenty-two inches.

ADHERENT PLACENTÆ.

Case 121, primipara; 36: Twins; long forceps.

Case 170, primipara; 29; no forceps.

Case 243, multipara; 25; short forceps.

Case 277, multipara; 31; short forceps.

My custom is to wait until the patient complains of pain before attempting to deliver the placenta, which is accomplished by expression.

In none of the cases given above did I introduce my hand into the uterus under one hour from the birth of the child.

PLACENTA PREVIA.

Case 146, multipara, 40: When first seen, the woman was collapsed and pulseless, as she had been flowing at intervals for a week. Whisky was used hypodermically. Os dilated to the size of a silver quarter, with placenta previa centralis; child presenting occipito-læva-anterior. Turning was easily accomplished by external manipulation; os was then forcibly dilated to size of a silver dollar, and the hand introduced between the placenta and uterus until the membranes were reached, which were ruptured and a foot seized and brought down. The child was delivered almost at once, with considerable traction, and was dead. The uterus contracted well, with no hemorrhage. The patient was conscious and able to speak, but in fifteen minutes had an anemic convulsion and died.

I regret the haste with which this delivery was accomplished.

SEPTICEMIA.

Case 18, primipara: Was not seen after the third day; her condition was normal until the ninth day, when septicemia existed. Uterus was curetted and washed out by Dr. Banta, but not much *débris* obtained. Recovery after forty-two days of constant attendance.

Case 25, primipara: Chill on fifth day. Curetted by Dr. Banta, with negative results. Recovery in two weeks. I think both of these cases would have had a fatal termination had it not been for Dr. Banta's timely aid, and had I had another case at that time I should have given up obstetrics in despair.

Case 296, multipara, 26: Chill on morning of third day. Curette and douche used at once. Some placental tissue and a small bunch of membranes removed. Recovery in eight days.

Three of my cases have been followed by pelvic cellulitis, and had a tardy recovery.

HEMORRHAGES.

Case 81, primipara, 18: Two hours after birth of child pulse 150 per minute. Uterus dilated and filled with clotted blood.

Cases 163 and 207 were complicated with post-partum hemorrhage, and are of no especial interest except that I was taught by them that hot intrauterine injections would not stop hemorrhage unless the womb was first emptied of clots.

Case 143, primipara, 32: March 2, 1889, Dr. Banta saw this patient, who had been taken with sudden flooding, which had ceased upon his arrival. There was no dilatation of the os and the doctor did nothing but send word to me that it was a probable case of placenta previa, and requested me to remain at the office during the day in order that I might go to the patient quickly. Saw her at five p. m., and found large quantity of blood in the bed.

Emptied vagina and found no dilatation of os. Exposed os and could see that there was no blood escaping from it, yet the lower blade of the speculum soon became filled with blood. Found a small artery upon anterior wall of vagina, midway between clitoris and cervical attachment of vagina, ruptured and spurting. This was ligated, and there was no further trouble. April 18th, the patient was delivered of a good-sized infant presenting O. L. A., and the placental attachment was at or near the fundus. There was no history of injury.

Case 276, Xpara: When first seen, patient had lost a large amount of blood, was still flowing, and os the size of a ten cent piece; tamponed and waited two hours, during which time there was renewal of labor pains. Sent for Dr. Banta, and upon his arrival removed the tampon and found os sufficiently dilated for application of forceps, which was done by Dr. Banta, to the head lying in the transverse diameter of the superior strait. Child born dead, and the mother had a protracted recovery.

ALBUMINURIA.

I have seen eight cases of albuminuria in pregnant women; six have been complicated with convulsions.

I induced premature labor in one case at the seventh month and had a living child. The usual remedies had been tried without avail.

Another case was seen not five minutes before the birth of the child; the mother had been ill and under the care of another physician for several weeks; the retinitis of albuminuria had caused blindness. The patient died within twenty-four hours after delivery.

ANOMALIES.

Case 269, multipara: Embolism of anterior tibial artery with large slough two months and one week previous to labor.

Case 254, primipara, 19: Labor of twenty-four hours; twelve hours afterward, pulse 130; temperature, 105; no chill; subsidence of bad symptoms within twenty-four hours.

CASES OCCURRING IN THE PRACTICE OF DR. R. L. BANTA, IN WHICH
I HAVE RENDERED ASSISTANCE WITH THE PRIVILEGE
OF CAREFUL EXAMINATION.

Placenta previa centralis: Child presented O. L. A. Turning by external manipulation; dead child; good recovery of mother.

The following three cases of dystocia were consecutive labors in the same patient:

(1.) Scapulo-dextra-anterior; turning by the bi-polar method; dead child. It was recognized that there was a diminished antero-posterior diameter of superior strait.

(2.) Sacro-dextra-anterior: Head extracted with great difficulty and delay, and only by application of forceps.

(3.) Foot presentation; rectification by external manipulation; Tarnier's forceps applied to head in O. L. A. position; forceps slipped repeatedly; uterus ruptured; child extracted with great difficulty even then; death of mother within one hour.

Primipara: Mento-læva-anterior presentation changed by Banta's method to occipito-dextra-anterior; forceps then applied to fix the head in the pelvic canal, and the case was terminated by nature.

Multipara: Was seen by me on November 20th, when a diagnosis of transverse presentation, with head to the right, was made. December 16th she was attended by Dr. Banta, who verified the diagnosis; turned and delivered.

Multipara: Previous labors always instrumental. High operation; head could not be made to engage even by repeated and forcible traction with White's forceps, but with less than one-eighth of the traction force previously used the head easily engaged with the Tarnier forceps.

Primipara: Protracted labor of forty-eight hours without engagement of breech, which presented sacro-dextra-anterior. Tarnier's forceps applied to breech and delivery accomplished in

less than one hour. No mark of the blades could be found upon the body of the child, but, unfortunately, the cord was severed by one of the blades.

OBSERVATIONS IN CONCLUSION.

In multiparæ with uterine inertia, I have administered ergot in five drop doses every fifteen minutes until good uterine contractions.

In primiparæ, morphine has been used to facilitate dilatation and lessen pain.

For after-pains, ergot has been used frequently.

Mortality: Of my own cases, *nil*. Counting the cases of placenta previa and albuminuria, occurring in the practice of other physicians, two-thirds of one per cent.

358 SOUTH DIVISION STREET.

Society Proceedings.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Reported by W. H. BERGTOLD, M. D., Secretary.

REGULAR meeting held July 1st, in the Parlors of the Hotel Iroquois, at 8.45 P. M.

The president, Dr. A. A. Hubbell, in the chair. Dr. F. Thoma was proposed for membership. Dr. T. Haven Ross was elected to full membership.

Dr. A. H. BRIGGS then presented a case of cyanosis in the person of a boy, fourteen years old. The boy had suffered from the various infant maladies with no unusual results, and had always appeared healthy until the age of eight. At this time he had an attack which was difficult at this late date to diagnosticate. He then suffered from acute sharp pain in all of the greater joints, with contractures of the surrounding and contiguous muscles. There appears to have been pyrexia, and the attack is said to have lasted about three weeks.

Toward the end of this sickness the present condition of cyanosis appeared. At the present time the boy is in his most favorable condition, for when very hot weather ensues he suffers from severe pains in the joints, great dyspnea, and excessive heat. Exami-

nation reveals a faint first heart sound, action rapid, but no murmurs ; lungs apparently normal.

The skin all over the body is of a bluish hue, the conjunctivæ are cyanotic, the fingers are markedly clubbed, and the nails livid. As said before, when the warm months appear, his condition becomes much worse, the eyes appear greatly enlarged, the lungs seem congested, and give rise to excessive dyspnea ; he experiences great pain in the joints, and the heart is very labored in action.

The mucous membranes then become almost black, and the tongue swells. Has never had any convulsions ; can sleep well, in fact requires more sleep than a boy usually does, and has no difficulty of locomotion.

DISCUSSION.

Dr. W. S. TREMAINE.—With a condition of faint first sound, and strong apex, he would be led to suspect obstruction somewhere in the greater vessels ; perhaps from an embolus which might have lodged, and caused a narrowing of a vessel. It might be, it is conceivable, a case of general telangiectasis, though he had never heard of a case.

Dr. P. W. VAN PEYMA asked why Dr. Briggs concluded it was from pulmonary obstruction. Was it because of his examination or because of his line of reasoning ? Most of these cases of cyanosis are due to pulmonary lesions.

Dr. F. W. BARTLETT takes Dr. Tremaine's view of the case, and would locate the obstruction somewhere in the venous system. He did not think it could be due to a neoplasm, because of the long standing of the case.

Dr. CALLAHAN did not think the trouble was now due to an embolus, for it has existed too long.

Dr. GROSVENOR did not think it was possible to make an exact diagnosis without a complete history and examination. He asked what had been done for the patient in the line of therapeutics.

Dr. W. H. BERGTOLD said that cases of cyanosis are due to one of two causes ; either an obstruction to the circulation, preferably in the lungs ; or to a communication between the right and left heart, or between the pulmonary artery and the aorta.

From the previous history of acute pain in the joints with muscular spasm, and a continuation of the same for some time with the supervention of the cyanosis, it is imaginable that the lad had suffered from a general infection of staphylococci ; as, for example,

general osteo-myelitis, with secondary infection of the endocardium, giving rise to ulceration and perforation of the inter-auricular or ventricular septum, leaving a permanent opening. He mentioned a case he had seen lately, of an Indian, about forty-five years old, who was excessively cyanotic and who he believes has a patulous foramen ovale, though he had never examined him. This case when quiet is several shades lighter than when exercising, a change, it seems to Dr. Bergtold, to be wholly in accord with the condition theorized to exist; for, with stronger hearts' action, more venous blood would probably be forced into the left heart, via the foramen.

Dr. TREMAINE thought the last point well taken, and said that the case was one of great interest. It ought to be thoroughly worked up and published.

Dr. ALVIN A. HUBBELL then presented a

NEW TEST FOR DETERMINING THE ABSENCE OR PRESENCE OF EQUILIBRIUM OF THE EXTERNAL OCULAR MUSCLES.

Since so much disturbance of the nervous system is referable to strain of the muscles of the eyes,—the ciliary, as in refractive errors and affections of accommodation, and the extra-ocular, as in want of proper functional balance,—it is desirable that tests for determining the existing states should be made as simple and universal as possible. At the very best, extensive apparatus and special skill seem to be necessary to estimate refractive and accommodative errors, and heretofore the same has been true of anomalies of the external ocular muscles. Recently, however, Maddox, of Edinburgh, has suggested a simple method for determining the latter. I have tried his instrument and found it so satisfactory and easy of application, that I desire to call the attention of the profession further to it.

The instrument consists of a glass rod about one-fourth of an inch in diameter and three-fourths of an inch long, set in a metallic disc or frame-work, so that light cannot pass around it at any point, but only through it.

When held before one eye, viewing a lamp-light in an otherwise darkened room, the blaze appears to be simply a streak of light running at right angles to the axis of the glass rod. The patient should be placed fifteen to twenty feet from the light to be used.

To test the external and internal recti muscles, this instrument is held before one eye with its axis horizontal. The vision of

both eyes then being directed toward the light, both the lamp-blaze and the streak of light are seen, and if the action of the muscles is balanced, the latter will pass vertically directly through the former. If the external recti muscles are too weak as compared with the interni, the streak of light will be to one side of the blaze, and to the side corresponding with the eye before which the glass cylinder is placed. The prism, with base toward the temple,—that is, out,—which brings and holds the light-streak through the blaze, measures the amount of deviation inwards of the eyes,—esophoria. On the other hand, if the interni muscles are too weak, the streak will be on the side of the blaze opposite to the eye before which the instrument is placed, and the prism with base in, that is, toward the nose, which brings the streak through the blaze, measures the deviation of the eyes outward,—exophoria. A deviation of three to eight degrees inward, or of eight to fifteen degrees outward, is sufficient to cause distress.

To test the state of the superior and inferior recti muscles, the glass cylinder is placed with its axis vertical. Then, if there is a correct balance, the horizontal streak of light will pass directly through the blaze. If it is below the blaze, the eye before which it is placed has a deviation upward or hyperphoria, and the prism before this eye with base down, which brings the streak through the blaze, measures the amount. On the other hand, if it is above, the other eye tends upward or has hyperphoria, and the prism before the same eye, base up, measures it.

Deviation of either eye above the other of one or more degrees may cause distress.

Thus, this simple instrument may be used by the general practitioner even without prisms, and valuable inferences drawn as to the bearing of the state of the recti eye-muscles on the cause of nervous symptoms. Of course, the greatest light is shed upon the case when this test is made after errors of refraction have been corrected, and in connection with measurements of the deviations, if present, by prisms.

This test may also be extended to the action of the muscles when the eyes are in accommodation, by bringing the test-light to positions near the patient.

This instrument can be obtained of the Fox Optical Co., in this city.

DISCUSSION.

Dr. GROSVENOR asked whether it had been demonstrated that an eye when covered would deviate, on vision with the other eye being permitted.

Dr. W. C. PHELPS asked what Stevens's idea concerning the relation of eye trouble and nervous symptoms was.

Dr. FALK asked how we were to know whether the patient has estimated the relation of the light and the streak of light correctly.

Dr. A. A. HUBBELL, in closing, said that it was a demonstrated fact that the covered eye, on efforts at vision by the other, would deviate. Stevens's idea was, that when the want of equilibrium between the various eye muscles becomes so great that single vision becomes difficult or impossible, then nervous symptoms ensue. He had presented this test because of its simplicity, and because, with prisms, the diplopia is much more difficult for the patient to interpret, than the relation of the lamp and the light streak made by the cylinder.

Dr. E. H. LONG then read a paper on Indigestion.

DISCUSSION.

Dr. Dorr believes that the most study concerning indigestion ought to be placed on its relation with microörganisms. The question is a very complicated one, as there are so many modifying factors.

Dr. BURGHARDT believes that locality and water often exert considerable influence on digestion.

Dr. GROSVENOR thought that the mind had much influence on the condition of digestion.

Dr. E. H. LONG said, in closing, that the point he wished most particularly to emphasize and bring out, was the use of antiseptics in digestive troubles. He does not believe in the indiscriminate use of pepsin. Lavage is practically a step in antiseptis, and thus is so often of much benefit.

It was announced that the subject for the August meeting would be Hay Fever, Dr. F. W. Hinkel taking its pathology and etiology, and Dr. F. H. Potter its treatment.

PHILADELPHIA OBSTETRICAL SOCIETY.

MEETING OF APRIL 3, 1890.

From the *Annals of Gynecology and Pediatrics*.

[Extract.]

PERFORATION OF THE UTERUS WITH A CURETTE — LAPARATOMY —
RECOVERY.

DR. JOSEPH HOFFMAN. — I was asked, the 25th of February, to see a patient in consultation, with a history of delayed miscarriage, of what was considered a six weeks' conception. I advised that the os should be dilated and the uterus curetted, to free it from the putrid product of conception. This was at once assented to, and the procedure initiated by the attending physician, a gentleman of no little experience in cases of the kind. The dilatation was done under ether with a Molesworth instrument, and the curetting attempted with the instrument here shown. There was no sign of any accident until shortly after the introduction of the curette and the removal of several fragments of partially decomposed placenta, when the operator noticed, as I myself had done, that the curette entered too far up for a pregnancy of so short a period. I said nothing, however, believing that an error had been made as to the duration of the pregnancy. At the operator's request, and seeing his alarm at the depth to which the curette penetrated, I took the instrument and carefully introducing it far up, directing it anteriorly against the abdominal wall, easily determined that it was in direct relation with it. At the operator's request, I continued the work of cleaning out the uterus, which was done as rapidly and carefully as possible, so as to avoid re-entering the abdominal cavity. When about to cease curetting, I noticed protruding slightly from the os what I at once concluded was omentum. This opinion was confirmed by gently drawing it down with a tenaculum.

I did this both with the idea of determining certainly that the wall of the uterus had been pierced through, and of temporarily tamponing the perforation with the omentum, to control hemorrhage, and, so far as possible, shut off the peritoneal cavity from the infection of the decomposing placenta. The woman was then put back to bed, and operation speedily arranged. Four hours afterward she was again etherized and the abdomen opened. The opening of the peritoneum was followed by the escape of a bloody

fluid and some clots. The peritoneum was markedly injected, as was also its intestinal investment. In order to bring up the uterus so as to examine it for the rupture, the incision was enlarged to about four inches. The organ was found to be peculiarly softened, suggesting by its consistency a fatty kidney; there were present cracks in its anterior peritoneal covering, through which blood oozed. These may have been caused by the forcible extraction of the organ through the abdominal incision. The perforation at first did not come into view, but a little search and further extraction brought it to sight. It was situated upon the antero-lateral surface of the organ, a little below the middle. It was ragged, and of sufficient size to admit the end of a little finger. The rent was closed by interrupted silk sutures, and bled freely up to the tying of the last. Indeed, an additional one was introduced, more for the stoppage of hemorrhage than aught else. The abdomen was then flushed with hot water, and a drainage-tube introduced. Through this, fluid escaped rather profusely for three days, when a rubber tube was substituted. This acted efficiently save for one day, when it became choked with lymph. The tube was removed entirely the seventh day. A peritoneal fistula persisted for three days, when the wound closed fully, and she progressed rapidly to recovery. Owing to the length of the incision, the patient was kept in bed for three weeks. A stitch-hole abscess caused the only rise of temperature. At the present writing she is entirely comfortable, goes out daily for a ride or walk in fair weather, and, in all respects, may be considered well.

It is only fair to say here that the attending physician does not agree with me that the curette caused the perforation, but attributes it to the dilator. That there is some measure of probability that such is the case I can readily understand, though the location of the rupture, according to my opinion, was so far up as to be out of reach of the end of the dilator, and, therefore, could not have been caused by it. This question, however, is a matter of so little importance that it is not worth further consideration.

The individual value of the case here recorded rests upon the fact that in abortions a frequent necessity for curetting and dilating the uterus arises. It shows that in special cases the uterus may be pathologically softened, and that a very moderate force may cause the accident here noted. It needs no argument to show that in simple dilatation of the cervix rupture may also take place. One such case, followed by death in a short period, has lately come under my notice.

This fact will also explain not only deaths from forcible dilatation, but as well the cases of acute peritonitis sometimes following the operation, with tedious recovery and necessary subsequent pelvic operation.

Traumatisms in the removal of intrauterine fibroids by the spoon saw, or *écraseur*, or other means, may readily extend through the peritoneal coat of the organ, and speedily terminate fatally, if this fact is lost sight of. This is beyond doubt the cause of death of a majority of the patients lost by Baker Brown in his operations for uterine fibroids. Probably the most frequent cause of perforating wound of the uterus is the uterine sound. Fortunately the accident is rarely fatal, though it sometimes results in persistent utero-peritoneal fistula, which is abundantly proven by the cases of Sir J. Y. Simpson, as recorded by Mr. Tait. If one thing stands out more plainly than any other in this case, it is the value of early operation, if we would hope for favorable results in such or similar conditions or accidents. In another case of almost the same history, where the uterus was dilated and a filthy sponge tent introduced, and sepsis produced through a rupture of the uterus, operation was delayed until the abdomen was filled with pus, and of course the woman died. Those of us who believe in the necessity of early operation at once when diagnosis is made, need have no fear that our importunity will be patiently heard or prudently acted upon. There are, there must be, dawdlers and dalliers in surgery as elsewhere, who will wait for a puerperal rigor before they will operate; or, as they choose to express it, "run the risk of operation," and while they "stand lingering, shivering on the brink," the rigor comes, and, aided by their silly procrastination, kills the patient; then the case is reported as an operation in extremis, and the death excused for this reason.

Three such cases have come under my immediate notice within the last few weeks, and while such a condition of affairs exists it is our business and our duty to urge in season and out of it, the folly, the insanity, or, if you please, the professional shame, that such things should be. Here is no place for sentimental mewing about conservatism. Here is a common ground where "preservation" and "conservation" mean the same thing, and "conservatism" as a word should be dropped from our vocabulary as insane and senseless, a breath without an idea.

DISCUSSION.

Dr. WILLIAM GOODELL.—I should like to give my experience with the curette. While I congratulate Dr. Hoffman on his pluck and upon the result of his case, and while, with his view of the case, I think that he was justified in operating, yet I am disposed to think it was not necessary.

For instance, a lady patient of mine had a uterine hemorrhage after the age of 75 years. I removed with the curette, on various occasions, many papillary vegetations, evidently malignant. But, the last time I operated, the curette perforated the womb. This did not produce the slightest symptoms, and she died nine months afterward from the disease.

Dr. Taylor will recall an analogous case which we saw together. I was curetting malignant vegetations from the endometrium, when the instrument passed into the abdominal cavity, carrying, of course, with it cancerous juices, yet no appreciable results followed. While curetting a cancer of the cervix, I got into the abdominal cavity, and touched with my finger an ovary and a loop of bowel. Cancerous matter undoubtedly entered the cavity, but there was not the slightest septic infection.

I operated in another case of cancer by the high operation on the cervix, and in making the posterior incision I entered the abdominal cavity and exposed a bowel. I closed the opening by sutures, and not a bad symptom followed.

In yet another case, where I was searching for the cervix uteri, in a case of great sloughing of the bladder, womb, and soft parts, following labor, I cut into the peritoneal cavity. Unquestionably, urine passed in, yet this patient recovered after only a slight rise of temperature for two days. The cervix had probably sloughed away, and the uterine cavity most likely communicated directly with the bladder. But this I did not think of at the time. So, two weeks later, I made another effort to find and dissect out the cervix, and again, to my great surprise, got into the peritoneal cavity. As before, no harm followed this second misadventure.

Dr. M. PRICE.—A year ago I saw a case of criminal abortion. There was retained placenta and a septic condition. I removed the placenta, but the pelvic inflammatory trouble increased. I operated, and found a large pelvic abscess. Owing to the great prostration, I decided simply to drain. On the fifth or sixth day she died. At the *post-mortem* an opening large as the little finger was found. If the opening had been closed at the time of operation, the woman might have recovered.

Dr. DAVIS.—The case described by Dr. Hoffman is of interest to me, because I met with a similar case in hospital practice not long since. The patient had syphilis, and the fetus had died. After suffering from preliminary pains for several days, the woman came into labor at eight and a half months, with a temperature of 102°. After the expulsion of a macerated fetus, the placenta was retained. An effort to remove it by the hand resulted in getting away most of it, but a portion was firmly adherent. It was decided to allow it to remain, and to employ antiseptic treatment until

it should be loosened. Thirty-six hours later, the patient's temperature rose. In my absence, the resident physician removed the remainder of the placenta with a small sharp curette, similar to that exhibited by Dr. Hoffman.

In making one especial effort with the curette, it seemed to penetrate farther than was expected, although no complaint of pain occurred. This was followed by a rapid and extreme fall in the temperature. The case subsequently died of puerperal sepsis, some two weeks afterward. At the *post-mortem* examination, the fundus was found in an encapsulated abscess, and at the fundus was an area of gangrenous muscular tissue, where the placenta had been adherent by syphilitic placentitis, and gangrene of the muscle had resulted. During this case, intra-uterine injections had been given, but had always returned promptly, and there was no evidence that the uterus had ever been perforated.

A method of treating retained placenta, when complicated by sepsis, which has recently been practised in Holland, is the vaginal extirpation of the uterus, and several successes by this method have been reported.

It is my own practice never to introduce into the uterus a sharp curette; the only one which I employ is the curette of Carl Braun, which is an instrument whose blade is as large as the thumb nail, having an edge no sharper than that of an ivory paper cutter; with this curette I have never seen injury inflicted.

Dr. WILLIAM H. PARISH. — I desire to say a few words in connection with the report of this case, inasmuch as it brings up a method of treatment of abortion which I consider extremely hazardous — that is, the use of the curette. If a curette is used, it should not be such an instrument as the one employed by Dr. Hoffman. In the "American System of Obstetrics," even Simon's scoop is figured as the instrument for the removal of the placenta. The use of that instrument is attended with very great danger. I have seen one case in consultation where, after a miscarriage of five months, the physician had used the latter instrument, and at the autopsy it was found that it had scraped deeply into the placental site, the normal roughness having been mistaken for partial attachment of an adherent placenta.

My own practice is the removal of the products of conception by the finger. This is not so difficult as it is thought to be by some. Some weeks ago, I saw, with Dr. O'Hara, a case of retained fetus at the fourth month, which had been dead for about a fortnight. I dilated with a tupelo tent for a few hours, and then with my finger removed the fetus and placenta through an os large enough to admit the use of only one finger. I first brought through the os a leg, which quickly separated from the body, as the fetus was putrescent. Then I secured the body, which separated at the neck. I then carried the finger into the brain cavity, removed the brain, made a crochet of my finger, and extracted the collapsed head. Finally, by combined manipulation, I removed the placenta with my finger, and washed out the uterus with solution of corrosive sublimate, 1 to 4,000, using a double-current tube. The patient recovered completely and rapidly. I have seen a number of such cases. I have never yet used the curette in abortion, and

I have never yet had a fatal case, though I have treated or participated in treatment of scores of cases.

There may be cases in which it would be proper to use the curette. Where there is recurring hemorrhage, with occasional somewhat dirty flow, and where it is known that no considerable portion of placenta remains, it would not be bad practice to use the *dull wire curette*. I have in the latter cases sometimes wrapped cotton around the dull curette, saturated this with a solution of bichloride of mercury, and then rubbed this over the intra-uterine surface, and detached fragments of the membrana decidua or minute portions of placental tissue, which have been productive of the hemorrhage. I then always wash out, or swab out, with an antiseptic. The use of the sharp curette to remove fragments of placenta is uncertain, unsafe, and unnecessary.

Dr. J. PRICE. — I agree with Dr. Parish in regard to the abuse of the curette. I do not see why the placenta cannot be delivered by the bimanual method, by the intelligent finger, and not by a metallic instrument. The reason of the failure is, that the physician tries to remove it with the patient buried in the bed. If he placed the patient on the table, he could clear the uterus without difficulty.

Dr. Goodell is reasoning about a different class of cases. To compare malignant cases with puerperal is scarcely fair. Surely, Dr. Goodell would not permit a quart of putrid septic *débris* to remain in the peritoneal cavity. The omentum was in the wound and it would have been difficult to reduce such a hernia by any other means than section. The septic condition could only be treated by drainage. Philadelphia is practically the only city in which cases of peritonitis are saved. Bantock states that he never saw a case of peritonitis operated on for that condition recover. In Germany they will not touch them.

The presence of healthy urine in the peritoneal cavity will do no mischief. Dr. Goodell has referred to the introduction of portions of cancer into the peritoneum. If I felt that I had contaminated the peritoneal cavity I should in all metro-peritoneal fractures at once close the opening, irrigate and drain the pelvis.

Dr. G. BETTON MASSEY. — The danger from the use of sounds might be lessened by the employment of one that is elastic. I have been using such a sound with much satisfaction. It is formed of a spiral of platinum, the flexible portion being two and a half inches long. The instrument is made of platinum, and this permits it to be heated red-hot to cleanse it, no other mode of cleansing being as efficient. It has sufficient elasticity to pass into the cavity, but yet will retain the curve imparted to it when withdrawn.

Dr. J. HOFFMAN. — It seems to me that in Dr. Goodell's case, where epitheliomatous matter was carried into the peritoneum, it would have been a good plan to open the abdomen to prevent contamination. The curette here shown has not a sharp edge; I can draw it forcibly over my hand without any bad result. I do not advocate the use of the curette where you can

introduce the placental forceps. With them you can loosen and remove the retained placenta in a few minutes, and by revolving the forceps you can be sure that all is removed. Of all methods, I think that of gouging away the early placenta with the finger nail the most bungling and unskilful. It is painful and needlessly protracted.

In this case, when I opened the abdomen, there was a quart or more of fluid in the abdomen, and the temperature had begun to go up. I never expect to see a more typical irritation of peritonitis than that presented by both parietal and intestinal peritoneum.

Progress in Medical Science.

SURGERY.

By JOHN PARMENTER, M. D.

PENETRATING GUN-SHOT WOUNDS OF THE ABDOMEN.

DR. AUGUST SCHACHNER, in the *Annals of Surgery* for June, 1890, contributes an article entitled Penetrating Gun-shot Wounds of the Abdomen, in which he gives in detail the results of some experiments upon dogs in this line of surgery. The experiments were divided into three classes: gun-shot wounds with interference, without interference, and of separate organs.

The first class, comprising thirty-two experiments, gave seventeen recoveries, 45 per cent.; (one experiment in which death followed immediately is omitted). In all except four of the remaining fourteen, terminating fatally, death occurred during or at the end of the first twenty-four hours after operation. Death followed in one and a half, three, three and a half, and four and a half days respectively in the four above excepted. The cause of death was as follows: Two from hemorrhage, 14.2 per cent.; five from shock primarily, 35.7 per cent.; six from sepsis, 48.2 per cent.; and one from shock consecutive to an operation for obstruction.

The second class consisted of five. These went without operation. One recovered. Death resulted in one from shock; in two from hemorrhage; in one from sepsis. The author thinks the recovery of one animal due to the probable slight injury.

The third class includes four resections, after Wölfler's method, a partial resection of the liver, a partial resection of the spleen, and one experiment upon the peritoneum. All recovered. Lastly a final experiment with Senn's test. As a result of his experiments, the author makes the following deductions:

1. In view of the uncertainties which attend these injuries, exploratory laparotomy should in every case be boldly but carefully performed, the operator being in readiness to meet any indication that the exigency of the case may demand.

2. Laparotomy in the linea alba is preferable to one performed in the course of the gall, unless there are reasons to believe that the gall became arrested short of the peritoneum, or its track infected, in which case incision and drainage should be employed.

3. Considering the objections against Senn's test as a diagnostic means of determining the necessity of a laparotomy, the possible harm outweighs to such an extent the possible benefit, that its general adoption is hardly justifiable.

4. The value of Senn's method in determining at the close of the operation the security of the intestinal tract is questionable and still *sub judice*.

5. Large intestinal wounds, not involving the mesenteric border, are best treated by partial resections.

6. Intestinal wounds upon the mesenteric border, unless very small, require a complete resection.

7. Where several large wounds are situated very close together, a single resection, including them all, should be considered.

8. Partial resections of the liver, spleen, or pancreas are feasible steps, and may be required.

9. Suturing of both openings in wounds of the liver and spleen for the arrest of hemorrhage is advisable.

10. Excepting superficial lesions, nephrectomy is the only procedure in wounds of the kidney.

11. Should obscure symptoms arise pointing to an early peritonitis, the use of salines is indicated.

12. If suppurative peritonitis is established, early exploratory incision, drainage and disinfection of the peritoneum should be undertaken.

CEREBRAL LOCALIZATION.

In the *American Journal of Medical Sciences* for July, 1890, Prof. Andrew H. Smith relates a case in which cerebral localization was illustrated by the effect of mental impression. A gentleman consulted him for a condition of the right hand and wrist resembling writer's cramp, but differing from it in that the condition was one of tremor rather than spasm. It did not result from special or exces-

sive use of the hand. There was also slight paresis of the right leg. Occipital pain was present, due to defective action of the ocular muscles, but the use of prisms relieved the pain and improved the condition of the hand and leg. Inasmuch as he had been treated by many physicians without avail, Prof. Smith advised him to be contented with the relief he had obtained, and gave him active employment to divert his mind. He got on very well, general health improved, hand and leg better, but still uses left hand in writing. A few days ago, in reading an article in *Harper's Magazine* for May, in which the writer describes the physical distress of signing 12,500 United States bonds in sixty-four hours, Prof. Smith's patient began to experience a severe pain, which commenced in the right hand, running up the arm into the neck, then into the occiput, where it became intense in a circumscribed spot on the left side of the head. The spot corresponded exactly to the situation of the postero-parietal convolution, the center for the wrist and hand of the opposite side, according to Ferrier. The patient knew nothing of cerebral localization, except that the brain on one side actuates the muscles on the other, and therefore the pain he complained of could not have been due to suggestion. Prof. Smith, therefore, concludes that :

The phenomena in the hand and leg had back of them a morbid condition of the cortical center, and that this morbid condition was in such wise influenced by the direction of the mind toward the function of that center as to express itself in pain. Probably the intermediate link between the mental action and the production of pain was a vaso-motor disturbance.

He thinks that while functional activity of a cortical center may give rise to an appreciable increase of local temperature, this case would seem to show that merely occupying the imagination with a function may excite a degree of disturbance in the center corresponding to that function. The pain originating so peculiarly confirms the cortical origin of the symptoms. The implication of the leg suggests that the posterior portion of the convolution was also involved. Accepting Ferrier's earlier conclusions regarding the function of the angular gyrus in relation to ocular movements, the proximity of this gyrus to the postero-parietal convolution would probably explain the improvement in the hand and leg when coincident with that of the eyes. The author concludes by saying that "the more recent views, however, as to the location of the center for ocular movements remove it so far from this region that this explanation scarcely seems tenable." (Should

Ferrier's conclusions regarding the angular gyrus prove true after all, this case would be a most interesting one, and a few more of a similar nature would give us strong corroborative clinical evidence to aid us in localizing cerebral centers.—P.)

A UNIQUE CASE OF APHASIA.

During the XIXth Congress of the German Surgical Society, Rosenberger, of Würzburg, described a unique case of aphasia with loss of power of communicating thought by pantomime or gesture (amimia). The case was as follows :

A boy, six years of age, sustained a kick from a horse over the left parietal bone, in consequence of which he was unconscious for twelve days, and after this time aphasic. This condition had existed five weeks when Rosenberger first saw him. At this time he had no fever and a normal pulse. Over the left parietal bone there existed three ulcers, the undermost of which was two c.m. over the left ear. It was about three c.m. long, equally wide, and showed marked bulging outward and distinct cerebral pulsation. In the neighborhood of the ulcers depression of the cranial vault could be felt. A slight paralysis of the fingers of the right hand was present. The patient had a good appetite and slept well. The eyes and ears were normal. The aphasia was complete. His intelligence was unaffected, for he understood everything correctly, recognized everything, and could select what he wanted out of different other things, but he could not make himself understood by nodding or shaking his head. As soon, however, as someone showed him how to do it he could immediately imitate the movements.

Rosenberger decided to operate, for two reasons ; to remove pressure caused by the depressed bone, and to cover the prolapsed portion of brain after the plastic method of Von Bergman.

The depressed portions of bone were together six and a half c.m. long by four c.m. wide. The corresponding defect was covered with two flaps taken from the surrounding region.

The subsequent course was without fever, and the result brilliant. On the fourth day the paralysis of the hand improved, on the fifth day he moved his head voluntarily for the first time, and on the sixth he uttered a sound like the letter i. He was discharged recovered on the twenty-second day, with speech completely restored.—*Centralblatt für Chirurg.* 1890. No. 25.

CHEMISTRY AND BACTERIOLOGY.

BY JOHN A. MILLER, Ph. D., Buffalo, N. Y..

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RECENT RESEARCHES ON PTOMAINES.

Immunity against septicemia induced by soluble substances. By Roux and Chamberland, (Annal. de l'institute Pasteur, 1888. *Jour. Analy. Chem.* IV., 108).

Cultures of the bacillus of malignant edema were sterilized and filtered, and portions of the filtrate injected into the abdominal cavity of guinea-pigs every third day. Some disturbances were produced, but subsequent injections were borne without apparent effect. Two days after the last injections, these animals, together with others used as controls, were inoculated with virulent germs of malignant edema. The control animals all died within eighteen hours, while those which had received the sterilized cultures remained permanently unaffected.

A second series of experiments seemed to show that the heating of the cultures to 105°–110° partially decomposes the chemical poisons. The serose fluids from the tissues of guinea-pigs dead from malignant edema were rendered germ-free; 40 cc. killed healthy animals in a few hours with all the characteristic symptoms of malignant edema, while the same quantity of the heated culture produced no effect. Seven or eight inoculations of 1 cc. of this fluid secured immunity against subsequent inoculations with the germs.

The experiments also show that in certain media the cultures of the germs do not produce substances which induce immunity.

Immunity against charbon symptomatique induced by soluble substances.—(Roux, *ibid*; *ibid*.) Experiments similar to the above show that the bacillus of charbon symptomatique, as well as that of malignant edema, produces a chemical poison, and that by the establishment of a tolerance for the poison immunity against the germs can be secured for a time.

The value of iodoform in the dressing of suppurating wounds.—Behring (*Deut. Med. Wochenschrift*, 1889, 653; *ibid*) claims that the value of iodoform is not due to its germicidal properties, but to the fact that it renders chemically inert the ptomaine, cadaverine. This position is supported by De Ruyter and by Warle.

Ptomaine of Hydrophobia.—Aurep (Proc. Med. Soc. of St. Petersburg, 1889; *ibid.*) obtained by Brieger's method from the brains of rabbits, in which hydrophobia had been induced, an alkaloidal substance of highly poisonous properties. Chemical composition not determined.

Small doses (1-100 to 3-100 mgrms.) produced in rabbits an elevation of temperature, restlessness, rapid breathing, and palpitation of the heart; medium doses (5-100 to 2-10 mgrms.) difficult respiration, tremor, weakness of the heart, and general loss of strength. Large doses (3-10 to 5-10 mgrms.) are followed by depression of temperature, paralysis of the extremities, salivation, and death, with symptoms of asphyxia. In these symptoms it is claimed that we have the complete chemical history of hydrophobia, the effects of the smaller doses corresponding with first, and those of the larger doses with later stage of the disease.

ON PLASTERS CONTAINING CAOUTCHOUC.

By Drs. SCHNEEGANS AND CORNEILLE.

Translated from the *Pharmaceutische Zeitung* for the BUFFALO MEDICAL AND SURGICAL JOURNAL.

By GROVER WILLIAM WENDE, M. D.,

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THE mass which we employ as a base for our plasters consists of lanoline, benzoinated tallow, caoutchouc, and dammar gum in varying proportions. Just enough of caoutchouc and gum are added to render them sufficiently adhesive, the greater part of the mass being composed of lanoline and fat, which impart to the skin a non-irritating effect. The addition of a small amount of glycerine will prevent drying and cracking on exposure to the air. The caoutchouc is added to the mass in a solution of benzine, 1-6. The solution is easily made by macerating rolled caoutchouc as ordinarily found in the market, in six times its weight of benzine, to be shaken frequently. At first the caoutchouc swells, but in the course of three or four days it will be completely dissolved.

OXIDE OF ZINC PLASTERS.—20 per cent.

R—Resin Dammar	15 parts.
Seb. Benzoinat	25 "
Lanolini	15 "
Caoutchouc	5 "
Glycerine	20 "
Zinci Oxidi	20 "
	100 parts.

After the resin has been melted upon an open fire, the tallow is added. The whole is strained through muslin folded three or four times. On being continually stirred, to this is added the lanoline and the solution of caoutchouc. By this method such a uniform mixture is obtained that the necessary precautions must be observed in bringing it upon the water-bath, owing to the evaporation of the benzine.

In working with larger quantities, the benzine may be abstracted and used anew. When the benzine has been entirely evaporated, the oxide of zinc, well rubbed up in glycerine, is next put in. The whole is thoroughly worked until the mass becomes homogeneous. It is now allowed to stand in a warm place till the air-bubbles cease to escape from the compound, then it is spread over shirting by means of a plaster machine. It is essential not to use the mass too warm, as it is apt to soak through the cloth. It is better to wait until it arrives at a proper consistency and then warm the machine slightly. The thickness of the layer will vary from that of an ordinary sheet of writing paper to that of a common playing card. With a little practice an individual will be able in the course of an hour to an hour and a half to use conveniently about two pounds of the mass of the above prescription, giving him about thirty-six yards of plaster eight inches wide.

The plaster is allowed to dry for two or three days in the open air, after which it is covered with muslin. Paper will answer to preserve this preparation, as the glycerine prevents further drying.

iodoform plaster.—20 per cent.

R—Resin Dammar	15 parts.
Seb. Benzoin	30 “
Lanolini	20 “
Caoutchouc	5 “
Glycerine	10 “
Iodoformi	20 “
100 parts.	

The process in preparing the iodoform plaster is similar to the one above described. It is necessary, however, to add the iodoform, well rubbed up in glycerine, to the mass after it has cooled off in order to prevent the evaporation of the iodoform. This plaster is best preserved in tin boxes.

MERCURIAL PLASTER.—20 per cent.

R.—Resin Dammar	20 parts.
Seb. Benzoin	34 “
Lanolini	20 “
Caoutchouc	6 “
Hydrarg. viv	20 “
	100 parts.

The mercury and lanoline are well rubbed together until no particles of mercury are visible. The color is at first a light gray ; during the process of mixing it becomes darker, and finally of a bluish gray. As heretofore, the resin and tallow are melted together, passed through muslin, the solution of caoutchouc added, and the benzine evaporated on the water-bath. To this, when still moderately warm, the mercury and lanoline are added and thoroughly worked. It is allowed to remain at a low heat till all air-bubbles have escaped. When in a semi-fluid condition, it is passed through the plaster machine. This plaster is best kept in tin boxes and in a cool place. It is of a rather soft consistence during the summer weather. The formula may be modified accordingly.

Selections.

DR. BREIMA recommends the use of the following in chronic gonorrhea as an injection :

R.—Creosote	m x.
Ext. fl. hamamelis,	
Ext. fl. hydrast. canaden.	aa m xv
Aquæ rosæ	3 xxxij.
M. Sig.—Dilute with warm water before using.	

FORMULA FOR MIGRAINE.—Dr. Hammerschlag publishes, in the *Allgemeine medicinische Centralzeitung*, the following prescription, which he has found valuable in migraine :

R.—Caffein citrat	gr jss.
Phenacetin	gr. iij.
Sacchar. lacti	gr. v. M.
Ft. Pulv.	

Such a powder may be taken every two hours until the patient is relieved.—*Medical News*.

CATARRH OF PHARYNX.—The following is claimed to be a useful gargle in catarrh of the pharynx :

R—Sulph zinci gr. xv.
 Thymoli gr. ʒ.
 Alcoholis } aa f ʒ jss.
 Glycerini puri }
 Aq. Menth. pip. f ʒ x.

M.

—*Medical and Surgical Reporter.*

FOR TYMPANITES.—The following formula for tympanites is quoted in the *Deutsche medicinische Wochenschrift* :

R—Naphthol }
 Magnesium carbonate } aa 75 grains.
 Pulverized charcoal }
 Oil of Peppermint 10 drops. M.

Divide into fifteen powders, of which one is to be given when required.—*Medical News.*

CONSTIPATION IN WOMEN.—Dr. Lutaud recommends the following in obstinate constipation occurring in women :

R—Citrate of iron and ammonium gr. 31.
 Fl. extract of cascara sagrada m. 32.
 Saccharin gr. 8.
 Water ʒ 2 ½.

A half teaspoonful three times daily before meals.—*Medical News.*

HYDRASTININE IN MENORRHAGIA.—Hydrastinine is obtained by oxydizing hydrastine. It may be given subcutaneously without pain, in doses of one grain of a five per cent. solution. Shortly after its administration there are light uterine pains. In ordinary cases of menorrhagia it acts well. In cases of pyosalpinx it has acted favorably. The usual formula is as follows :

R—Hydrastinine (P., D. & Co.'s) gr. i.
 Aquæ dest. ʒ ii.
 M. Sig.—Six minims once or twice daily.

In hemorrhage due to endometritis or myomata, the percentage of favorable results has been large. No evidence of the effect of hydrastinine in labor is furnished, but it is probable that it will be favorable, because it contracts the vessels, and uterine pains result. The best time for its use is six to eight days before menstruation, which was rendered profuse by textural changes in the uterus.—*Therap. Monatschrifte.*

Correspondence.

LETTER FROM PARIS.

The Apostoli Clinic—Electro-therapy applied to the Treatment of Diseases of Women—A Buffalo Doctor's Opinion of the famous Electrologist and his Work—He is pleased—The "Yarns" heard in America are all Bosh as to the Suffering the Treatment causes—Apostoli is enthusiastically defended.

IT MIGHT interest the readers of the BUFFALO MEDICAL JOURNAL to hear what is being done in the hospitals of Paris.

First of all, I may say that Paris is not a good place to do post-graduate work. The hospitals are widely separated from one another, and the hours of service are in the morning. Moreover, there are but few special hospitals; in fact, the abdominal and gynecological surgery is done by the general surgeons connected with the various large institutions.

Fortunately for the medical man who is visiting Paris and anxious to do some good general work, the Rue du Jour, or Apostoli clinic, takes place in the afternoons of Tuesday, Thursday, and Saturday. So, in this respect, it does not interfere with his work in the general hospitals. Like other dispensaries and private clinics, it is decidedly more attractive inside than out. In fact, one's first impression of this somewhat noted institution is an experience similar to Lawson Tait's. At first one shrinks back, and wonders whether women are compelled to walk through that gloomy court and ascend two staircases to get their medical treatment. The hospital consists of five rooms, plainly furnished, but very clean and nicely cared for, with an average attendance of from thirty to thirty-five patients daily.

Besides Dr. Apostoli, there are two assistants, and one of these, his *chef*, treats the patients. The histories of the cases are taken very carefully, and daily records kept. When a patient is seen for the first time, the history is read, an examination made, and the course of treatment outlined and begun at the next visit. The diagnosis is made, and several medical men (and often one sees visitors of national reputation present) are invited to corroborate it, if possible, and give reasons for their opinions. I must say I have been particularly pleased with Apostoli, and can, in all fairness, say that he is a brilliant diagnostician, and what work he

does is done with an earnestness and honesty which are truly commendable. What his earlier utterances and claims may have been, I know not, but the position which he now takes in reference to electro-therapy, as applied to diseases of women, is not as extravagant as we in America have supposed. He is a man of great individuality and force of character, and thoroughly sincere in his work. His attention to strangers, his courtesy and politeness, and his desire to have the details of treatment thoroughly understood by them, is very gratifying indeed. Like other men who have worked in special lines, he has formed opinions which he, by his argument and experience, is prepared to substantiate. Much that he says I cannot say that we all agree with him in, yet I am often struck with the probable truth of his utterances. He believes but little in pessaries and supports of any kind, and but very exceptionally employs them. Moreover, he takes the position that *most* lacerated cervixes and misplaced wombs are the cause of little trouble in themselves, and only give rise to symptoms when some periuterine inflammation is also present.

One sees a great many fibroids of all sizes and in various locations. Some are extremely large and have been under observation for many years. There is no doubt that the distressing symptoms that these women complained of have been relieved, and they have been enabled to work with comfort and satisfaction. By careful measurement with the tape externally, from various prominent points, and with a small instrument which is used to measure the thickness of the skin and superficial fat in the abdominal walls, one can easily see that, in some cases, a diminution in the size of the tumor has taken place; and, in exceptional cases, the tumor has disappeared. I sometimes feel that upon the grounds of cosmetic surgery, even although no active symptoms are present, some of these very large tumors ought to be removed, and particularly when seen in young women. I have visited the clinic regularly, and can say that the work done is good. The strictest antiseptic precautions are observed. All patients have an injection before and after a treatment, and all electrodes are placed in boiling water, and afterward in a saturated solution of iodoform.

I have been most interested in the use of the faradic current, and in galvano-puncture. I have seen many women extremely sensitive to pain — indeed in whom the lightest pressure over the womb and ovaries caused agonizing suffering — relieved of all their pain after a fifteen minutes' seance with the faradic current of tension.

In exceptional cases one or two treatments has cured the subjective evidences of their trouble, while upon examination the pathological condition was the same as upon the first application, showing us that what Apostoli claims is evident, viz : that, although the gross manifestations of the disease are not overcome, the symptoms are relieved and the flow permanently so.

I have also seen much good from galvano-puncture. After having treated a woman suffering with a mass of cellulitis for six weeks with positive galvanism — which by the way is nearly always employed, as most patients suffer from pain or hemorrhage — with little benefit, Dr. Apostoli punctured the spot with his usual precautions, with much satisfaction to himself and gratification to his patient. The punctures are never deeper than one-eighth of an inch, and the needle employed has a small point, protected by a sheath up to the spot desired to enter the tissues. The strength of current is twenty-five to thirty ma. positive galvanism. Resolution took place and no bad symptoms developed. The yarns, that we have heard in America of the agony these women are made to suffer is all bosh, because one of the first rules of all electro-therapy is to stop the current if not well borne by the patients. Some patients take with ease, and without flinching, 130 to 150 ma. of current. Much care is taken to see that the skin is in no place abraded, and also that the clay-pad is thick over all sensitive areas.

At present there is quite a revolution of feeling in Paris among the profession, as to the claims of Apostoli. The operating surgeons say electricity is no good, and will do nothing for the diseases said to be benefited and cured by Apostoli and his followers. At a meeting of the Society of Practical Medicine of Paris, of which Apostoli is a member, a commission was appointed to investigate his work at his request. Consequently, every day a number of old patients treated years ago are examined by one of this commission, and their present condition noted and compared with that previous to treatment. The new patients are carefully examined, and a diagnosis made and compared with that of Apostoli, and the treatment is begun. This naturally makes the work very interesting to us all, and each one of us visiting the clinic are delighted to see how frank and honest Apostoli is in all of his work. To say that he is unscientific and uneducated is unfair, and to accuse him of quackery and dishonesty is an infernal libel. Enthusiastic? yes; one capable of working with indefatigable energy, true; and, at the same time, full of a desire to do what is best for those women who

place themselves under his care. In this impression I am sure I am borne out by every man who is to-day visiting the Rue du Jour.

I have attended Terrier and Champonnier, and other solid abdominal surgeons in Paris, and I believe the best work is done by Terrier. His hospital — Hôpital Bechat — is a modern institution, and thoroughly equipped for all kinds of scientific work. Here asepsis is arrived at. He has a splendid operating room, with glazed walls and ceilings, and the floor of cement. It is divided into two portions, separated by iron doors. The one room is for old suppurative cases, and the other for non-septic ones. The instruments are sterilized by heat, and put into sterilized hot water. The napkins and towels are also treated by a special process, and made sterile. No antiseptics are used, excepting to wash the body of the patient and the operator's hands, and salve or iodoform is applied on the wound, with antiseptic gauze over it.

I saw him perform an abdominal hysterectomy last week, for a very large uterine fibroid. An incision was made about two inches above the umbilicus, extending to the pubes. There were no adhesions; consequently, when the peritoneal cavity was fully opened, the great mass could be rolled out of the abdomen. The interesting feature was the treatment of the pedicle. A long steel bodkin was pushed through the mass as near the vaginal vault as possible. A piece of rubber tubing — solid — was firmly drawn and fully stretched under this steel pin, and tied with silk. The tumor was amputated, and the pedicle was left about an inch in length. The center was dissected out and seared over with the thermo-cautery, then the edges were brought together like the flaps of a stump and sewed firmly and finely with silk sutures. The steel wire was removed and the stump was returned into the abdominal cavity and the rubber ligature left in situ. (?) It was a very brilliant operation, and made one feel proud of the triumphs of surgery. I have also seen him perform many other tube and ovary operations, and a few days ago a hysteropexie or ventro-fixation, which also pleased me very much. The woman was fifty years of age, and suffered from extreme procidentia uteri, complicated with pyosalpingitis. An abdominal incision was made of good length — in fact, these men always make large openings — and the tubes and ovaries carefully removed. Both tubes (?) were cystic and filled with pus. The abscess was then pulled up and four silk sutures were passed through its anterior surface, leaving about one inch of uterine tissue within their grasp. Each suture was carried into

the peritoneum of the corresponding side, and then firmly drawn together; holding, therefore, in their grasp, the uterine wall and the peritoneum of the incision. The rest of the peritoneum was picked up and sewed, then the fascia, and finally the skin. A drainage-tube was left in the abdominal cavity.

Dr. Terrier told me he knows of a woman in whom a hysteropexie was performed — the tubes and ovaries being left in — who conceived and carried her ovum to term. Unfortunately one does not see only brilliant, good, and justifiable surgery; but, on the contrary, the most wholesale mutilation of women. It is only a few days ago when one of the first men in Paris diagnosed an enlarged and painful ovary, on the right side. Immediately the young woman was placed on the table and an abdominal section made. When the abdomen was opened, the ovary in question was found to be normal, but the opposite tube was slightly bound down; so, in order to take advantage of the incision, this tube and ovary were gouged out. Another similar case was the removal of the ovaries for a small bleeding fibroid, the operator having no faith in other so-called *unscientific procedures*. If Apostoli has done nothing more than demonstrate the possibility of relieving the pain and hemorrhage in these cases, surgery should welcome his work, in the interests of humanity.

And now let me say a word about hemorrhage. I believe we have made mistakes in our technique, when we don't succeed in controlling the bleeding. I have seen cases come to the clinic who bled profusely after an examination. Indeed, I am sure one woman lost at least six ounces of blood. In these cases Apostoli uses the largest carbon electrode that is possible to be introduced into the uterine cavity, and endeavors to touch the whole internal surface of the womb. This treatment lasted about ten minutes, with the effect of completely arresting all hemorrhage for several days. About sixty ma. positive galvanism was given.

I have also attended Guijon at the Hôpital Neckar, but I am not pleased with the French methods of operating for stricture of the urethra. Seldom do they perform a primary urethrotomy, and are satisfied with the use of much smaller sounds than we in America; in fact, the French urethral surgeon practically disregards Otis's ideas of the normal caliber of the urethra.

I shall endeavor to send you another letter before I leave Paris for Berlin.

Dr. Park is in Paris. I saw his name registered at the Banking office.

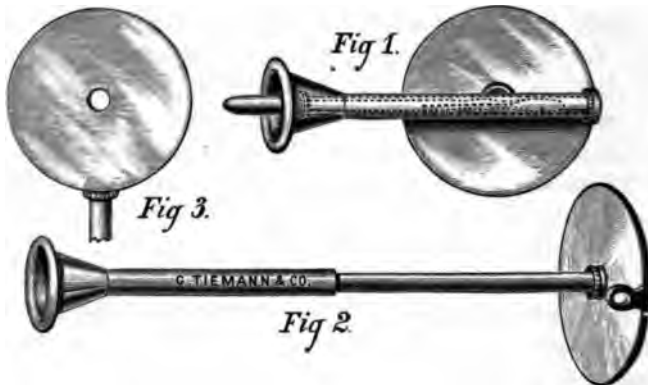
H. E. HAYD.

PARIS, June 24, 1890.

New Instruments.

THE POLYSCOPE.

A NEW INSTRUMENT, BEING A COMBINATION OF STETHOSCOPE, THERMOSCOPE, LARYNGOSCOPE, AND OTOSCOPE. DEvised BY ERNEST WENDE, M. D., B. SC., PROFESSOR OF DERMATOLOGY IN THE UNIVERSITY OF BUFFALO.



The accompanying cuts represent an instrument which may prove of some diagnostic value. It combines stethoscope thermometer and reflector, so constructed that it can be readily packed in a small compass and carried in the upper vest pocket. It consists of an ordinary single-barreled stethoscope, so designed that the ear-piece, which is made of hard metal and highly polished, can be quickly adjusted and employed as a reflector for the examination of nose, throat, or ear. The reflector has a focal distance of about six inches. The reflecting efficiency of its surface being equal to that of the ordinary mirror used for that purpose.

Fig. 1, represents the instrument closed, the barrel being telescoped and reflector lying flat upon it. The dotted lines denote the position of thermometer securely held by means of a metallic cap and screw, rendering breakage impossible.

Fig. 2, shows stethoscope adjusted for use.

Fig. 3, shows reflector in position with barrel of stethoscope to be used as handle. The advantages obtained are these—durability, portability, its various applications, and readiness of manipulation.

The instrument was most admirably made for me by G. Tiemann & Co., 107 Park Row, New York.

174 FRANKLIN STREET.

BUFFALO MEDICAL AND SURGICAL JOURNAL

A MONTHLY REVIEW OF MEDICINE AND SURGERY.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed to the editors :
284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXX.

AUGUST, 1890.

No. 1.

Editorial.

VOLUME XXX.—ALPHA.

THE new volume of this JOURNAL begins with this (August) number, and we present it in an entirely new dress. The type with which it is printed was cast especially for this magazine, and will be used only in printing it. This will insure to our readers clear letterpress for many years. The paper we now print it on is of a quality to add to the elegance of our pages.

To our heretofore efficient editorial staff two names are added that will, we feel sure, result in further extending the usefulness as well as increasing the quality of the JOURNAL.

Professor John A. Miller was an occasional contributor to the last volume, and his graceful pen will be found in frequent use in this, with even greater force and interest.

Dr. DeLancey Rochester is already well known to the profession of Buffalo and vicinity, and his medical writings have been such as to command attention. He will be heard from in the future in a way, we predict, that will please and interest our readers.

To Drs. James Wright Putnam, John Parmenter and Frank Hamilton Potter, we are indebted for valuable aid during the past year, and they will continue in their several fields of usefulness, with even increasing energy and ability.

We shall continue our efforts to make the JOURNAL a pride to the City which nurtures and shelters it, and a welcome visitor to our

patrons and readers wherever found — to which end we invoke the good will and support of the medical profession, in whose interest alone it is published.

IMPORTANT MEDICAL LEGISLATION.

THE *Journal of the American Medical Association*, in its issue of July 26, 1890, in a leader under the above title, ably discourses on the New Medical Examiners' Law as follows :

“The Medical Society of the State of New York is to be congratulated upon the success which, after seven years of heroic effort, it has achieved in the advancement of medical education. To this organization, more than to all other agencies or influences, the profession is indebted for the results that have been secured. In view of the action which has been taken by the House of Representatives, it did seem, for a time, as though in the Empire State, where least of all we should anticipate defeat, the hands were to be turned back upon the dial of medical progress, and that in the long-drawn struggle, illiteracy, joined hand-in-hand with selfish greed, was yet again to triumph. But, at last, the better counsels have prevailed, and congratulations are in order.

“The opposition to the present law, we regret to say, was not confined to sectarian schools alone, nor to such influences as charlatans would wield — but we think, unfortunately for them, some of our medical educators, who should have been conspicuous in their efforts to secure the passage of the bill, are numbered with the opposition ; seemingly from the fact that as the result of its beneficent working the patronage of their schools would be diminished — as it surely should and will be.

“The law approved by the Governor on June 4, 1890, will mark a new era not only in New York, but, incidentally, in the entire country. It cannot be said that in this contest, where every point has been fought out inch by inch, there is evidence of hasty and inconsiderate legislation. The utterances of this bill are like decisions of the Supreme Court, from which there should be no appeal.

“In the next number of the *Journal* we propose to present the bill entire, and we commend it to the careful consideration of our readers. As the result of such consideration, the first cardinal

point which occurs to us is this : that the State presumes to reaffirm and to emphasize the fact that it alone has jurisdiction over the practice of medicine within its own limits. It may not only determine as to who may practise medicine, but it also presumes to assert what the qualifications of its practitioners shall be. In the exercise of this power it recognizes the responsibilities which it assumes, and seeks to make the best provision. In the second place, it proposes to redeem the profession from illiteracy by the requirement of a satisfactory preliminary education as a condition to an entrance upon the study of medicine. In the third place, it provides for a definite and uniform standard of examinations, and each and every student must attain to that standard as a condition to graduation. In the fourth place, it divorces medical teaching from the licensing power. To this end the examining boards are under the supervision of special examiners, who are appointed by the regents, and who themselves cannot be members of those boards. And, finally, it compels the colleges to teach their students three years, instead of two.

“We have, then, in this single bill, the requirements of preliminary education ; a definite standard for examinations ; a separation of teaching from the licensing power ; and a three years’ college course. Thus grandly has the State redeemed itself from what had threatened her, as a sad misfortune. It may be objected that among the provisions of this bill there has been an unwise recognition of sectarian schools. A careful study of the law gives evidence that there is one common power behind the separate boards, and that while they officiate as agents the power of decision rests alone in the Board of Regents. If this board shall perform its duties wisely and well, as we sincerely hope and anticipate, the State of New York will have little cause to fear from the illegitimate practice of medicine so long as the law shall remain in force. Besides, we are confident that a death-blow to sectarian medicine is never so wisely dealt, nor so sure of fatal results, as when by law all medical students must attain to a high standard of education, and by that standard *stand or fall*.”

These are encouraging words, for which we beg to thank our contemporary, and we hope they will be carefully read and pondered by the profession throughout the State.

A NEW LAW AFFECTING THE REGISTRATION AND LICENSE OF PHYSICIANS OF THE STATE OF NEW YORK.

CHAPTER 500, of the laws of New York, 1890, materially modifies the preëxisting laws of registration and license, but affects only those physicians having been graduated or licensed by institution or bodies outside this State, and who had not been authorized to practise in this State previous to the *twenty-fourth* day of June 1890.

The full amendment is as follows :

All who, having been graduated from incorporated medical schools or colleges without the State as doctors of medicine, or licensed to practise physics or surgery under the laws of those European countries in which said degree does not confer the right so to practise, shall procure their diploma from said corporations, or their licenses from such countries, to be indorsed by the regents of the university on the recommendation of a legally constituted board of medical examiners of this State. Every such indorsement shall be in form of Schedule A or of Schedule B, provided by the tenth section of this act. The regents shall keep a record of such indorsements and may require applicants to verify their statements under oath ; and indorsement made with fraudulent intent, or gross carelessness or ignorance shall be deemed a misdemeanor, and shall subject the indorser or indorsers upon conviction thereof, to a fine of two hundred and fifty dollars ; provided however, that no such indorsement as is above specified shall be made until the applicant thereof shall file with the person, officer or body above named as authorized to make such indorsement, or certificate, signed by the secretary of the University of the State of New York, showing that such applicant has received the degrees of bachelor or master of arts, of bachelor or master of science, or of bachelor or doctor of philosophy, from a college or university duly authorized to confer the same ; or that he has passed an examination conducted under the authority and in accordance with the rules of the Regents of the University of the State of New York, in arithmetic, grammar, geography, spelling, American history, English composition and elementary physics ; or that he possesses qualifications which the regents have considered and accepted as fully equivalent to the above named qualifications ; as such degrees and certificate are more particularly defined in an act of the legislature of the State of New York, by chapter four hundred and sixty-eight of the laws of eighteen hundred and eighty nine, entitled "An act to provide for the preliminary education of medical students," and as the same may be hereafter amended.

Thus, physicians not holding diplomas granted by some legally incorporated college of this State, and desiring to practise in this State must first possess the preliminary qualifications required of all medical students before graduation from a medical school of this State ; second, their diplomas must be indorsed by the Regents of

the University of the State of New York, at Albany, upon the recommendation of a legally constituted board of medical examiners of this State; third, the then indorsed diplomas or licenses must, as heretofore, be registered in the County Clerk's office of the county in which they intend to practise in.

This new law seems, also, to take from the medical colleges of this State the power to endorse diplomas or licenses granted outside of the State.

Any person, therefore, who has begun the practice of medicine in this State, since June 24, 1890, and has not complied with the law as above, is undoubtedly practising illegally.

WE REPRODUCE the following editorial from the *Cincinnati Lancet-Clinic* of July 5, 1890, as a timely and considerate statement of questions that are of great professional interest and importance just at this time :

THE HEAT AND ITS EFFECTS.

The heat of the last two weeks has been remarkable as occurring so early in the season, it being very rare, indeed, for fatal sunstrokes to occur in the first summer month. More than a score have already taken place in this city, while the news of the daily press informs us of a similar mortality in other cities and towns, while even those who live in the country are not exempt from the fatal effects of the sun.

Reports of sunstroke are usually of the heat effects on adults, while the direct and indirect effects on the infant population are many times as great. Too often their main nutrient, milk, has become tainted or poisoned from the absorption of germs and gases, making of it a dangerous article of food, and productive of summer enteritis, or other trouble that leads to a fatal termination.

At this time of the year it is a good plan to have all milk sterilized as soon as possible. This is a very simple process, and consists of putting the milk in a clean bottle, loosely corking with a clean, new cork, and then placing the bottle in a vessel of water, and heating it slowly to the boiling point, this temperature being continued for forty-five minutes; then tightly cork the bottle and set it in a cool place until needed for use.

The nutrient properties of the milk are not destroyed, or even weakened, by this process, but for most persons it is more easily digested and is more nourishing.

Babies, children and adults, in hot weather, should live as much as possible in the shade, where there is the freest possible circulation of pure air. Long and frequent cool baths for infants are very conducive to their health and comfort. There is nothing like a long, cool bath, to relieve the discomfort of prickly or summer heat, following this with a little anointing of the creases of the skin with cold cream, vaseline, or fresh lard.

In cases of looseness of the bowels, a few doses of the ordinary chalk mixture will usually furnish the desired relief. This should be given in tablespoonful doses, and after every stool. Where there is a weakening of vitality, with very great propriety and advantage, teaspoonful doses of maltine may be added to the sterilized milk; the diastatic power of maltine being capable of rendering soluble and digestible any starchy food that may be in the stomach. Starch foods, such as Irish potatoes and breads, have often been regarded as the immediate and irritating cause of infantile enteric disorders. In part this may be true, and yet these starch foods were the very ones the lacteals and absorbents were crying for, and needed to stay the waste that was going on with fatal rapidity.

Right here the inestimable value of maltine, with its diastatic solvent properties, is quickly made manifest in changing the character of the discharges, and causing an irritant factor to become one of nutrition; given in sterilized milk the benefit of both is obtained.

In the city it is a good thing, in every possible case, to send the mother and infant out to the parks and suburbs for one, two, or three hours after sundown. The car ride is easy, while a shawl or other garment spread on the grass will afford a genuine relief and change from the mother's lap or cradle.

A little instruction from the family physician to his patrons in these simples may be the means of saving many valuable lives; nor should the physician take it for granted that his clients are informed in such matters, for very intelligent people sometimes are very ignorant of the plainest hygienic rules. This is especially the case in regard to the care of very young children. We recently saw an illustration of this in a very intelligent appearing mother, who did not even know how to hold her infant in positions of comfort to the babe and ease to herself. Even in such matters as this the doctor may give wholesome advice.

STODDARD BROS., of No. 84 Seneca street, have recently opened an instrument department in connection with their drug store. This enterprising firm deserves the thanks and support of the profession in their new enterprise. They will handle the instruments of the leading makers and will be glad to obtain any instrument not in stock on the shortest possible time. Mr. George B. McCullough has been secured as the manager of this department. Mr. McCullough has had a large experience in the instrument business, and is besides a most courteous gentleman. We have no doubt but in his hands this department will be made not only successful for the proprietors, but attractive to the profession, and that those who heretofore have frequently been compelled to send out of town for their instruments, will find it more convenient and just as satisfactory to purchase through this firm.

A SUCCESSFUL PORRO-CESAREAN SECTION.—Dr. Joseph Price, of Philadelphia, has recently made a successful Porro operation, the history of which possesses peculiar interest. A healthy woman, forty-four years old, had a pelvic fibroid, 6 x 4 inches in diameter, completely blocking the parturient canal, the uterus being studded with numerous smaller fibroids, from the size of a filbert to an egg. The operator waited for term and chose, as nearly as could be estimated, the last day. After incising the uterus and delivering the child, a large healthy female, the uterus and tumor were lifted out, a Bantock-Koeberle noead and pins were applied, and all cut away. The intestines were kept from view by large flat sponges, and the sutures placed without allowing a drop of fluid to enter the abdomen. On the ninth day, the stitches having been removed, the patient was nursing her baby, bright and cheerful, having had no discomfort. This was a perfect supra-vaginal amputation, with extraperitoneal treatment of the pedicle, and as near an ideal operation as surgery can boast.

Dr. Price has now done a series of twenty-five consecutive supra-vaginal hysterectomies, including this Porro, without a death—the most perfect series, so far as we know, yet reported.

THE first fruits of the new medical law are beginning to appear. The annual announcements of Bellevue Hospital Medical College, and the Medical Department of the University of the City of New York, just received, state that "with the session of 1891-92 three courses of lectures will be required for graduates." We expect that other colleges not heretofore requiring three courses will fall into line as gracefully as do these two metropolitan schools.

Personal.

DR. WILLIAM J. CONKLIN, of Dayton, was elected president of the Ohio State Medical Society at its annual session in Columbus in June. Dr. Conklin departed for Europe July 17th ultimo, to attend the Tenth International Medical Congress in Berlin. He will return early in September.

DR. ELMER E. STARR, of Buffalo, sailed for Europe in July. It is announced that he will remain abroad for about six months, and spend a portion of the time wheeling through France and Germany.

DR. GEORGE T. WETMORE, of New York, has recently paid a visit to Buffalo in the interest of the New York Physicians' Mutual Aid Association. During the few days Dr. Wetmore remained in the city, we understand he increased the membership of this worthy Association with upwards of fifty names. Considering the fact that this is the vacation season, when so many physicians are either out of the city, or are declining any business except such as strictly pertains to their profession, we regard this as a very creditable showing; and we hope that every one of the Buffalo members will consider it a pleasure and a *duty* to retain affiliation with the Physicians' Mutual Aid Association during the remainder of their lives.

MRS. LYMAN ABBOTT, wife of the successor to Henry Ward Beecher as pastor of Plymouth Church, is to become one of the editors of *The Ladies' Home Journal*, on September 1st, next.

Society Meetings.

THE AMERICAN SOCIETY OF MICROSCOPISTS will hold its next annual meeting in Detroit, Mich., Tuesday, Wednesday, Thursday, and Friday, August 12, 13, 14, and 15, 1890.

PROGRAMME OF SUBJECTS OF DISCUSSION:

Representation of the Society at the World's Fair, Chicago, 1893. Discussion to be opened by Ex-Gov. Jacob D. Cox, Cincinnati, Ohio: Micrometry, Prof. William A. Rogers, Waterville, Me: Proposed Standing Committee on Medico-Legal Microscopy, Prof. Marshall D. Ewell, Chicago, Ill.: Uniformity in Tube Lengths, Prof. Simon H. Gage, Ithaca, N. Y.: The Advisability of Adding more Members to the Publication Committee, Prof. D. S. Kellicott, Columbus, Ohio: Proposed New Constitution, Dr. William J. Lewis, Hartford, Conn.: The Advisability of Meeting at Same Time and Place of the American Association for the Advancement of Science, Prof. W. H. Seaman, Washington, D. C.: Advisability of Sending Copies of the Publications to some of the great Colleges and Libraries of the World, Dr. Lee H. Smith, Buffalo, N. Y.: Fees of Experts with the Microscope, C. M. Vorce, Esq., Cleveland, Ohio.

PAPERS.

The following titles of Papers to be read have been received up to the date of issue of this circular:

The Full Utilization of the Capacity of the Microscope, and Means of Obtaining the Same, Edward Bausch, Esq., Rochester, N. Y.: (1) The Structure of Protozoa, (2) Microscope Objectives, Prof. T. J. Burrill, Illinois State University, Champaign, Ill.: (1) Abnormal Forms in the Diatoms and Conclusions therefrom, (2) Review of Some of the Generic and Specific Distinctions in the Family *Coccinellidae*, Ex-Gov. Jacob D. Cox, Cincinnati, Ohio: (1) The Microscopic Identifica-

tion of Hair, (2) The Effect of Curvature of the Cover Glass upon Micrometry, (3) Description of Scale, Manufactured by Marshall D. Ewell, in Pursuance of resolution of A. S. M., adopted in 1889, (4) A New Form of Stage Micrometer, (5) Some Experiments to Determine the Limit of Vision as Related to the Size of the Object Observed, (6) A Review of Some of the Medico-Legal Questions Involved in the Cronin Case, Prof. Marshall D. Ewell, Chicago, Ill.; Observations on the Blood in Health and Disease, Dr. Simon Flexner, Louisville, Ky.; (1) The Transition from Columnar to Stratified Epithelium, (2) Picric and Chromic Acid for the Rapid Preparation of Tissues for Classes in Histology, Prof. Simon H. Gage, Ithaca, N. Y.; (1) The Rotifera of Central Michigan, (2) Recent Methods of Investigating Microscopical Animals, Prof. D. S. Kellicott, Columbus, Ohio; Some Methods of Treating Nerve Tissue, Dr. William C. Krauss, Buffalo, N. Y.; (1) An Infallible Method of Preparing Injecting Gelatine and Injecting Small Animals, (2) Observations on Mounting, Dr. R. N. Reynolds, Detroit, Mich.; Résumé of the Past Year's Advance in Microscopy, Dr. Lee H. Smith, Buffalo, N. Y.; (1) A new Flash Light in Photography as Applied to Microscopy, (2) Postal Cards and Vegetable Fibers, (3) The Possibilities of the James Cement, with Many Fine Specimens, Dr. Thomas Taylor, Washington, D. C.; The Cancer Cell, Dr. L. Younghusband, Detroit, Mich.; Fresh Water Rhizopods of Oakland, Co., Stuart H. Perry, Pontiac, Mich.; Form and Endings of Striated Muscular Fibers, Mrs. S. S. Phelps Gage, Ithaca, N. Y.

The titles of Papers promised by other prominent workers have not yet been received. All who propose reading papers are requested to fill out the blanks enclosed and mail to the undersigned, who will forward them to Secretary Burrill. These suggestions apply also to the blanks for membership. A marked increase in membership is looked for at the Detroit meeting. Admission fee, \$3.00; annual dues, \$2.00, payable in advance.

Completion of manuscript prior to meeting will greatly aid the Publication Committee. Papers read before the Society may be published in any reputable journal, provided due acknowledgment is made that they are from the Proceedings of the American Society of Microscopists.

Negotiations relating to reduced railroad fares have been in progress. Should they be successful, due notice will be given.

The Local Committee at Detroit will issue circulars relating to the "Working Session," and the "Exhibition." They will supply badges and look after the general welfare of those attendant upon the Convention.

GEORGE E. FELL, M. D., *President*,
Buffalo, N. Y.

THE American Public Health Association will hold its Eleventh Annual Meeting at Charleston, S. C., Tuesday, Wednesday, Thursday, and Friday, December 16, 17, 18, and 19, 1890.

THE American Gynecological Society will hold its Fifteenth Annual Meeting in Buffalo, Tuesday, Wednesday and Thursday, September 16, 17, and 18, 1890.

CANADIAN MEDICAL ASSOCIATION, Montreal, June 25, 1890. — The twenty-third annual meeting of the Canadian Medical Association will be held in Toronto, on the 9th, 10th and 11th of September, next. Arrangements will be made with the Railroad and Steamboat Companies for a reduced traveling rate, and certificates entitling members to such reduction will be issued by the secretary on application. Members intending to present papers at this meeting, are requested to notify the secretary at as early a date as possible of title of the paper intended to be read.

JAMES BELL, M. D., *Secretary*.

Journalistic Note.

THE *Western Medical Reporter*, in its July number, presents a most interesting one. The editor displays great good nature and equally good form in his reply to the criticisms in "Country Doctor."

Book Reviews.

A TEXT-BOOK OF PRACTICAL MEDICINE DESIGNED FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By ALFRED L. LOOMIS, M. D., LL. D., Professor of Pathology and Practical Medicine, in the Medical Department of the University of the City of New York; Visiting Physician to Bellevue Hospital, etc. Eighth edition; revised and enlarged with 215 illustrations; 8vo; pp. 1147. New York: William Wood & Co., 1889.

The fact that this book has reached an eighth edition in five years, sufficiently indicates its popularity—at any rate among the students of the University of the City of New York. Nevertheless, this does not make any less inexcusable its first appearance, since it is merely a reproduction of other men's ideas, fortified though it may be by a certain amount of experience on the part of the writer. The advisability of writing a book on the practice of medicine is questionable, when the author has nothing original to bring forward in the subject-matter, even if the arrangement of the subject be new. However, this treatise is fairly well put together, and some points deserve special mention. The introductory chapter on inflammation particularly is well worth perusal.

The body of the book is divided into six sections, the first of which is devoted to Diseases of the Respiratory Organs. It is a

little surprising that in this edition, published in 1889, "all of which has undergone careful revision," no mention whatever is made of the local use of cocaine in acute coryza. A mode of treatment that has become so general, should at least be chronicled, even if only to be condemned by the writer.

After discussing the nature of acute lobar pneumonia at some length, our author concludes that it is "a general constitutional disease with local manifestations, undoubtedly depending upon a specific cause." In this he follows the teachings of Draper, Jørgensen, and Flint. Is it not more in accordance with clinical observation to conclude that in acute lobar pneumonia, as in diphtheria, we have a disease originally local from which is developed a general septic fever? The statement that "there is no relation between the amount of lung involved and the intensity of the symptoms," is no proof whatever of the constitutional character of the disease; for no one, we suppose, would claim that acute follicular tonsillitis was a general disease with local manifestation; and still in that affection "there is no relation between the amount of tissue involved and the intensity of the symptoms." Another statement that "no second chill occurs when another lobe, part, or the other lung is attacked," is only partially true, for there is always at such time a great exacerbation of the fever - the second stage of a rigor. Moreover, the author makes no mention of a fact that goes far towards proving the local nature of the inflammation, viz., that the disease can be arrested at *any* stage in its progress, and that with the arrest of the inflammatory processes in the lung the general fever and other symptoms subside.

The recommendations for the treatment of pneumonia are good, except the objection to the use of carbonate of ammonia because, if given in sufficiently large doses to act as a stimulant, it irritates the stomach. Such gastric irritation may be prevented by giving the remedy in milk or mucilage of acacia. In our hands it has proved the most useful of drugs in this disease, because, in addition to its stimulating effects upon the heart, it has a very beneficial effect upon the pulmonary mucous membrane, thinning and loosening the fibrinous exudate.

One little paragraph on the etiology of phthisis presents so accurately the modern view, that it is worth quoting :

Although the bacillus is accepted as the sole *exciting* cause of phthisis, its omnipresence and the impossibility, under the present social conditions, of avoiding a more or less intimate contact with it, render the predisposing causes of its development, without which it is inactive, of paramount clin-

ical importance. These causes are general and local. The most important general causes are an inherited or acquired feebleness of constitution, anti-hygienic influences, climate and soil. The local causes are inflammatory conditions of the pulmonary tissues.

In the section devoted to Diseases of the Digestive System, the diseases of the stomach are very poorly treated, the use of lavage as a means of diagnosis in the various forms of gastric indigestion not even being mentioned. It seems almost criminal to place in the hands of young practitioners, a text-book of medicine that handles the treatment of "summer complaint in children" in the manner in which this book does. The only good point mentioned is the use of calomel, and the author does not state the special indications for that drug, nor how long its use should be continued. It is little wonder that, with such teaching to fall back on, "the death-rate from this disease in New York City is twice that of any other city in the world." Neither the sterilization of milk, nor any substitute for milk as a food, is even mentioned. We trust that, for the sake of his patients, Dr. Loomis practises better than he preaches.

The other parts of this section deserve no especial mention in the way of either praise or condemnation. Section III., devoted to Diseases of the Heart, Blood Vessels and Kidneys, surprises us by its superficiality and lack of originality, in a department where we might expect to find evidences of careful clinical and experimental research on the part of the author.

In the section on Acute General Diseases, diphtheria claims our attention. The morbid anatomy, etiology, clinical history, diagnosis and prognosis are all fairly well given, but when we come to the treatment, we are surprised to find in this book, which "has undergone careful revision" in 1889, no mention whatever made of the use of various digesting agents for the destruction of the membrane, nor of the operation of laryngotomy, which has so largely taken the place of tracheotomy for the relief of laryngeal diphtheria. Of tracheotomy itself the nearest mention is made, and the special after treatment of the patient upon whom the operation has been performed, is left entirely to the imagination. As the success or failure of the operation of tracheotomy in diphtheria depends almost entirely upon the subsequent treatment, this omission, in addition to the numerous errors of diagnosis and treatment, should be enough to condemn the book as unworthy to be used as a text-book for students and as a reference work by experienced physicians.

It is a pity that the numerous errors and shortcomings of this

work, but there is not a section and scarcely an article that is not in need of "careful revision" by some one capable of making it.

The binding and letterpress are all that could be desired.

DE L. R.

SOCIETY TRANSACTIONS.

- I. TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK. Eighty-fourth year. 1890. Edited for the Society by FREDERIC C. CURTIS, M. D., Secretary. Standard octavo. Illustrated. Pp. viii.—490. Published by the Society. Philadelphia: William J. Dornan, Printer. 1890.
- II. TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Vol. XIV. For the year 1889. Small octavo. Pp. 480. Edited for the Society by JOSEPH TABER JOHNSON, M. D., Secretary, Washington, D. C. Philadelphia: William J. Dornan. 1889.
- III. TRANSACTIONS OF THE ASSOCIATION OF AMERICAN PHYSICIANS. Fourth session, held at Washington, D. C., September 18, 19, and 20, 1889. Vol. IV. Standard octavo. Pp. xviii.—381. Printed for the Association. Philadelphia: William J. Dornan. 1889.
- IV. TRANSACTIONS OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION at the Twenty-second Annual Session, held at Jackson, April 17, 18, and 19, 1889. Published by the Association. Standard 8vo; pp. 188. Jackson: Clarion-Ledger Printing Establishment. 1889.
- V. TRANSACTIONS OF THE MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND, at its Ninety-first Annual Session, held at Baltimore, April, 1889. Paper, standard 8vo; pp. 264. Edited for the Faculty by G. LANE TANEYHILL, M. D., Recording Secretary. Baltimore: Press of John B. Kurtz. 1889.
- VI. TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF MISSOURI, at its Thirty-second Annual Session, held at Springfield, May 21 and 22, 1889. Paper, standard 8vo, pp. xiv.—218. St. Louis: Ev. E. Carreras, Printer. 1889.
- VII. TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA. Thirty-sixth Annual Session, held at Elizabeth City, April 16, 17, and 18, 1889. Paper, standard 8vo, pp. 164. Wilmington: Jackson & Bell, Printers. 1890.
- VIII. TRANSACTIONS OF THE EIGHTH ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION. Held in the City of Washington, D. C., May 30 and 31, and June 1, 1889. 8vo, cloth, pp. iv.—150. New York: D. Appleton & Co. 1890.

I. The Transactions of the Medical Society of the State of New York, at its eighty-fourth annual session, held in Albany, N. Y., February 4, 5, and 6, 1890, comes to hand promptly, and it may justly be said of this volume that the society never published a better one. The scientific excellence of the book is attested by the contributions of such men as Keyes, Vander Veer, Bryant, Morris, Gibney, Chase, Corning, Granden, Currier, Coe, Fox, Bulkley, Good-

willie, Roe, and a host of others. The sound financial status of the Society is made apparent in the treasurer's report, and, taken altogether, this is one of the best volumes of society transactions we have seen for many a day. The Society has only to keep steadily on in its present lines of good work to command the respect of the entire medical world.

II. The Transactions of the American Gynecological Society for 1889, presents itself in its usually attractive form. The volume is overflowing with interesting material that has already been largely noted in the journals. The paper by Dr. Garrigues, on the Use and Abuse of Antiseptic Injections in Obstetrical Practice, is well worth the price of the book, and the discussion thereon brings out the lights and shades of the picture in an ample manner. The next meeting of this Society will be held in Buffalo, September 16, 17, and 18, 1890.

III. The fourth annual volume of the Transactions of the Association of American Physicians contains nineteen papers of interest, upon which the discussions were able. The book, a modest standard octavo of xviii. 381 pages, would make a valuable addition to any physician's library. It is edited by the secretary of the association, Dr. I. Minis Hays, and printed by Mr. William J. Dornan, of Philadelphia—two experienced men in their respective fields—and can be obtained upon application to either of these gentlemen.

IV. The Mississippi State Medical Association puts forth a neat volume of 188 pages, as the result of its work during its Twenty-second Annual Session. One of the very interesting papers in this book is by Dr. T. J. Crofford, of Memphis, entitled, *A New Method of Performing Hysterectomy*, in which he reports a case where he removed the entire organ, leaving no uterine tissue what ever. This is the method he advocates, and his case goes far to fortify his argument. Many of the other papers possess considerable interest, though we think it had been well if the discussion had also been published. Discussion is to a paper what a background is to a picture, and each is made to stand out in its best color when these are properly shaded.

V. The Medical and Chirurgical Faculty of Maryland is one of the oldest of the State Medical Societies, and always presents an interesting annual volume, this one for 1889 being no exception to the rule. It is organized into seven sections, viz.: Surgery; Practice of Medicine; Obstetrics and Gynecology; Materia Medica and

Chemistry ; Anatomy, Physiology and Pathology ; Microscopy, Micro-chemistry and Spectral Analysis; Ophthalmology, Otology and Laryngology. It seems to us that this is rather a cumbrous organization for a State society, particularly as the several chairmen of these sections are required to report on the progress in their departments, each in an annual address.

It is the custom of this Society to invite a prominent physician, usually from beyond the borders of the State, to deliver an "Annual Address," and we note that Dr. William Osler performed this duty in 1889, choosing for his subject The License to Practise. Among the many good points made in this address occurs the absurd advocacy of an elective State Board of Medical Examiners. It is to be hoped that never may the high office of State Medical Examiner be dragged into the purlieus of political intrigue and chicane.

This volume, though bound in paper, is edited by an experienced Secretary, Dr. G. Lane Taneyhill, and it is well printed.

VI. The State of Missouri has an active Medical Association, and its annual transactions contain some interesting and instructive papers. Those upon Abdominal Surgery indicate proficiency in that line of work, while many others are worthy of extended mention had we the space to give it. This book is also bound in paper -- a draw-back to its preservation upon library shelves.

VII. The Medical Society of the State of North Carolina publishes its transactions in the *North Carolina Medical Journal*, whence this volume, bound in paper, containing 164 pages, is reprinted. This Society, also, does some excellent work, but its sub-division into sections seems to us a hindrance to the accomplishment of its best work. Dr. George Gillett Thomas was elected President at this (1889) meeting, and Dr. L. M. Hays was chosen Secretary.

VIII. The papers that enter into this volume of Transactions of the American Laryngological Association, have already appeared, we believe, in the *New York Medical Journal*, and, therefore, an extended comment on them is not necessary. We must, however, express our satisfaction at having them in this permanent form. Few, if any, of the special societies have accomplished better work than this one. We notice that its annual volume is always received with praise by those familiar with its line of work.

Dr. J. N. Mackenzie, of Baltimore, was elected President for the current year. This was a well-merited honor, and was most gracefully received.

A NEW MEDICAL DICTIONARY. Including all the Words and Phrases used in Medicine, with the proper Pronunciation and Definitions. Based on Recent Medical Literature. By GEORGE A. GOULD, B. A., M. D., Ophthalmic Surgeon to the Philadelphia Hospital, and Clinical Chief Ophthalmological Department, German Hospital, Philadelphia. With Elaborate Tables of the Bacilli, Micrococci, Leucomaines, Ptomaines, etc.; of the Arteries, Ganglia, Muscles, Nerves and Plexuses, of Weights and Measures, Thermometers, etc.; and appendices containing Classified Tables with Analysis of the Waters of the Mineral Springs of the United States, and Tables of Vital Statistics. Cloth, 8vo, pp. xi.—519. Philadelphia: P. Blakiston, Son & Co. 1890.

For a long time we were without good medical dictionaries, and the want was a serious one. Recently, however, owing to the labors of Foster and Billings, the want has been supplied in a most elaborate manner. These columns have contained notices of their works, and while our satisfaction with them, as already expressed, is very great, there seems still a place for a smaller and cheaper work (as far as price was concerned) that could be placed in the hands of students and others who might not be able to obtain the former. This place has been taken by the work of Dr. Gould, and there is no longer any excuse for a library to be without a good modern dictionary. He says truly in the preface that "it would not have been half the labor to make a volume double or treble its size;" the difficulty was to make a book compact, concise while omitting nothing of positive value. This, we think, the author has accomplished, and we can therefore say that it is the best work of its size that we know. We can recommend it without hesitation. The press-work is good—type, pages, and its general arrangement being very satisfactory. F. H. P.

CYCLOPEDIA OF THE DISEASES OF CHILDREN, MEDICAL AND SURGICAL. The article written especially for this work by American, British and Canadian authors. Edited by JOHN M. KEATING, M. D. Vol. III.—1371 pages. Illustrated. Philadelphia: J. B. Lippincott Co. 1890.

The third volume of this excellent work fully bears out the reputation of the preceding volumes. This volume is divided into four parts, devoted respectively to Diseases of the Digestive System, Diseases of the Genito-Urinary Organs and the Blood, Surgery, and Diseases of the Osseous System and the Joints.

In the short space at our command, it would be impossible to give an analytical review of the entire work, and it would be invidious to select special articles when each is the work of a master in his department. The article on Blood seemed entirely disconnected with the rest of the section in which it is included, but a

footnote explains its appearance here instead of in Vol. II., where it more properly belonged, by stating that, as Dr. Griffith was asked to undertake its preparation at a late date, it was impossible to place it in that volume. The illustrations of the various articles are most excellent, those showing apparatus for correcting deformities being especially worthy of mention.

A TREATISE ON NEURALGIA. By E. P. HURD, M. D., Physicians Leisure Library. Series IV., 1890. George S. Davis, Detroit, Mich. Price, in paper, 25 cents; in cloth, 50 cents.

In a neat little volume of 153 pages is considered briefly but ably a subject, the study of which has engaged the attention of writers from time immemorial. The author divides his treatise into ten chapters, treating his subject systematically, and although not being a subject amenable to much original investigation, yet the author cites many cases and experiences that have come under his own observation. The treatment of neuralgia is the important point connected with the whole subject, and the one which surmounts all others. The writer lays much stress upon the constitutional treatment, and herein his little work is to be commended. The local treatment is also ably discussed, together with a general review of all anti-neuralgic remedies and agents up to the present time.

The typography is up to the high standard of this house.

W. C. K.

HOW TO PRESERVE HEALTH By LOTIS BARKAN, M. D. American News Co., New York. Pp. 344.—Paper. Bound in cloth, \$1.00.

This book, written for lay readers, is full of useful knowledge. It is fully abreast of the times, and, unlike so many books of its class, it does not attempt to make doctors out of its readers.

In addition to hints on hygiene, it devotes a goodly portion of its pages to nursing special diseases.

We cheerfully recommend this publication.

J. W. P.

BOOKS AND PAMPHLETS RECEIVED

Diseases of the Rectum and Anus—Their Pathology, Diagnosis, and Treatment. By Chas. B. Kelsey, A. B., M. D., Professor of Diseases of the Rectum, at the New York Post Graduate Medical School and Hospital. Also Professor of Diseases of the Rectum at the University of Vermont, etc. Third ed., re-written and enlarged, with two chromolithographs and 100 illustrations. Standard 8vo, pp. x.—183. New York: William Wood & Co., 1896.

Terminologia Medica Polyglotta. A Concise International Dictionary of Medical Terms. Compiled by Theodore Maxwell, M. D., Camb., B. Sc., Lond., F. R. C. S., Edin.; with the Assistance of Nine Collaborators. In Latin, English, French, German, Italian, and Spanish. 8vo, pp. xvi.—459. London: J. & A. Churchill. Paris: G. Masson. Philadelphia: P. Blakiston, Son & Co. 1890.

Annual of the Universal Medical Sciences. A Yearly Report of the Progress of the General Sanitary Sciences throughout the World. Edited by Charles E. Sajous, M. D., and Seventy Associate Editors. Five volumes. Philadelphia: F. A. Davis. 1890.

Familiar Forms of Nervous Disease. By M. Allen Starr, M. D., Ph. D., Professor of Diseases of the Mind and Nervous System, College of Physicians and Surgeons, New York. With illustrations, diagrams, and charts. 8vo, pp. xii.—339. New York: William Wood & Company. 1890.

Annual Report of the State Board of Charities. Fourth Year, 1889. Transmitted to the Legislature, January 15, 1890. 8vo, pp. 411. Albany: James B. Lyon, State Printer. 1890.

Practical, Sanitary, and Economic Cooking, adapted to persons of moderate and small means. By Mrs. Mary Hinman Abel. The Lomb Prize Essay. 12mo, pp. xii.—190. Published by The American Public Health Association. 1890.

Philosophy in Homeopathy. Addressed to the Medical Profession and to the General Reader. By Charles S. Mock, M. D., Professor of Materia Medica and Therapeutics in the Homeopathic College of the University of Michigan, at Ann Arbor. 12mo, pp. 174. Chicago: Gross & Delbridge. 1890.

Mineral Springs and Health Resorts of California, with a Clinical Analysis of every Important Mineral Water in the World. Illustrated. A Prize Essay. Annual Prize of the Medical Society of the State of California, awarded April 20, 1889. By Winslow Anderson, M. D., joint editor and publisher of the *Pacific Medical Journal*, Assistant Chair Medical Chemistry and Materia Medica, and Teacher of Chemistry in the Laboratories of the University of California, in the Medical and Dental Departments, etc. 8vo, pp. xxx.—384. San Francisco: The Bancroft Company. 1890. Price, \$1.50. Special rates to Spring owners.

How to Examine for Life Insurance. By John M. Keating, M. D., President of the Association of Life Insurance Medical Directors, etc. 8vo, pp. viii.—204. Philadelphia: P. Blakiston, Son & Co. 1890.

Rheumatism and Gout. By F. LeRoy Satterlee, M. D., Ph. D., Professor of Chemistry and Therapeutics, in the New York College of Dentistry, etc. The Physicians' Leisure Library. Detroit: George S. Davis. 1890. Price, cloth, 50 cents; paper, 25 cents.

Wood's Medical and Surgical Monographs. Vol. VII., No. 1. July, 1890.

Eighteenth Annual Report of the Board of Inspectors of the House of Correction of the City of Chicago, and Reports of the Superintendent and City Physician to the Board, for the year 1889. Chicago: Knight & Leonard Co., Printers. 1890.

Menstruation and the Removal of Both Ovaries. By George J. Engelmann, A. M., M. D., St. Louis, Mo.: Reprint from the Transactions of the Southern Surgical and Gynecological Association, November, 1889.

The Professional Reference Lists. Designed for and intended as an advertising medium of the interests of Fred D. Van Horen, 265 Broadway, New York.

Illustrated Catalogue and Price List of Dr. Geo. H. Taylor's Remedial Apparatus. The Improved Movement Cure, 71 E. 59th street, New York.

Proceedings of the Philadelphia Obstetrical Society for February, March and April, 1890. Reprint from the *Annals of Gynecology and Pediatrics*. Philadelphia: University of Pennsylvania Press. 1890.

Annual Report of the Department for the Insane of the Pennsylvania Hospital, for the year ending April 22, 1890. Presented to the 139th Annual Meeting of the Managers of the Pennsylvania Hospital. By John B. Chapin, M. D., Physician-in-Chief and Superintendent. Philadelphia: Press of Ferris Brothers. 1890.

Climatology and Diseases of Southern California. By F. E. Bullard, A. M., M. D. Reprint from the *Southern California Practitioner*. Prize Essay of the California State Medical Society. 1890.

Another Hitherto Undescribed Disease of the Ovaries. Anomalous Menstrual Bodies. By Mary A. Dixon Jones, M. D. Brooklyn: Reprint from *The New York Medical Journal*, for May 10 and 17, 1890.

The Treatment of Local and General Peritonitis. By W. E. B. Davis, M. D., Birmingham, Ala. Reprint. Read before the Medical Association of the State of Alabama, April 14, 1890.

The Epithelioma. An Amateur Monthly Journal. McKibbin & Kingsley, Editors and Publishers. Vol. I. Nos. 1, 2 and 3. May, June, and July, 1890.

Supra-Vaginal Hysterectomy. Hysteromyomectomy with Suspension of the Stump in the Lower Angle of the Abdominal Incision. By Howard A. Kelly, M. D., Gynecologist to the Johns Hopkins Hospital, Baltimore. Reprint from the *Medical News*, June 25, 1890.

Extra-Uterine Pregnancy. Papers read before the Obstetrical and Gynecological Society of Baltimore Jan. 14 and Feb. 11, 1890. By Dr. G. W. Milkenberger, Dr. T. A. Ashby, and Dr. H. A. Reed. Published by order of the Society.

Some Recent Cases of Pelvic and Abdominal Surgery. By L. S. McMurtry, M. D., Gynecologist to the St. Louis Dispensary and Hospital, St. Louis. Reprint. *Annals of the Pennsylvania State Medical Society*, May 14, 1890.

The Treatment of the Female Genitalia. Address of Dr. J. C. Davis. By W. C. Chertman, M. D., Lecturer on Diseases of Women, at the Institute of New Medical Department, New York. Published by the Institute of New Medical Department, New York.

Report of the Committee on the Diseases of the Female Genitalia. By the Committee on the Diseases of the Female Genitalia, of the American Medical Association. Published by the American Medical Association, Chicago, Ill.

Report of the Committee on the Diseases of the Female Genitalia. By the Committee on the Diseases of the Female Genitalia, of the American Medical Association. Published by the American Medical Association, Chicago, Ill.

Report of the Committee on the Diseases of the Female Genitalia. By the Committee on the Diseases of the Female Genitalia, of the American Medical Association. Published by the American Medical Association, Chicago, Ill.

Identité de la Dengue et de la Grippe-Influenza. Par le docteur Jules Rouvier, Professeur de Clinique Obstétricale et Gynécologique à la Faculté française de Médecine de Beyrouth, etc. Prix : un franc. Beyrouth (Syrie) Direction de la Revue Internationale de Bibliographie. 1890.

An Intra-Ligamentary Ovarian Cyst Successfully Treated by Iodine Injections. Reported by R. B. Rhett, Jr. Reprint.

De l'action Polaire Positive du Courant Galvanique Constant sur les microbes et En particulier sur la bactériodie Charbonneuse. Par M. M. Apostoli et Laquerrière. Paris. Fasciculus. Through Dr. H. E. Hayd.

Nine Months' Work in Abdominal Surgery. By Clinton Cushing, M. D., Professor of Gynecology, Cooper Medical College, San Francisco, Cal. Reprint *Pacific Medical Journal*, July, 1890.

Bureau of Education. Circulars of Information, Nos. 1, 2, and 3, 1890. Contributions to American Educational History. Edited by Herbert B. Adams. I. The History of Federal and State Aid to Higher Education in the United States, by Frank W. Blackmer, Ph. D. II. English-Eskimo and Eskimo-English vocabularies. Compiled by Ensign Roger Wells, Jr., U. S. N., and Interpreter John W. Kelly. Washington: Government Printing Office. 1890.

The Therapeutical Applications of Peroxide of Hydrogen and Glycozone (Medical). By Charles Marchand, Chemist. Revised edition. New York. 1890.

HEALTH BULLETINS.

Tennessee State Board of Health, July 20, 1890.

Michigan State Board of Health, July 3, 1890.

New York State Board of Health, May, 1890.

Newport, R. I., Board of Health, June, 1890.

Abstract of Sanitary Reports. Vol. V., Nos. 27, 28, 29, 30. Marine Hospital Bureau. Washington, D. C.

Abstract of Proceedings of the Michigan State Board of Health Meeting, April 15, 1890.

MEDICAL COLLEGE ANNOUNCEMENTS FOR 1890-91.

Albany Medical College and catalogue.

Baltimore Medical College and catalogue.

Bellevue Hospital Medical College, with list of Graduates for 1890.

College of Physicians and Surgeons of Chicago.

College of Physicians and Surgeons in the City of New York, with catalogue.

Long Island College Hospital, Brooklyn, with catalogue.

McGill University. Annual Calendar. Faculty of Medicine.

Meharry Medical Department, Central Tennessee College, Nashville.

National Medical College, Medical Department, Columbia University, Washington, D. C.

New York Medical College and Hospital for Women.

New York Polyclinic and Hospital.

Niagara University, Medical Department.

University of the City of New York, Medical Department.

Western Pennsylvania Medical College, Pittsburg.

Literary and Miscellaneous.

PERHAPS the most extraordinary article ever published upon Hypnotism, appears in the *Cosmopolitan Magazine* for August. It was secured from one of the two most celebrated professors of the weird art, the Frenchman Donato, and the illustrations were secured by having a number of subjects taken to the photographic gallery of Mr. Kurtz, in New York, and there hypnotised under the camera by Donato himself. The illustrations show very fairly the mystical powers which the hypnotiser exerts; and the vivid descriptions to make plain a subject which is now exciting much attention all over the world. One who has not seen the Indian illustration of the hypnotising of the man, George, takes pains to inform you, under his apparatus, "that he is a person of low capacity," supposing the wonderful powers described. Others, who have been subjected to it in the past, testify to its efficacy in curing various ailments, and in inducing sleep, and in other directions. It is a very interesting article, and well illustrated.

in our endeavors to carry it on in a manner which shall meet the approbation of the members of our profession.

When persons who say that you are their family physician apply to us, we intend to refer them to you for a note which shall state that you approve of their seeking our aid. We shall always be pleased to treat such patients as you may send to us as needing special skill or apparatus for their relief, and, whenever you desire it, will send you a written statement of the conditions which we find. As this is a purely charitable institution, however, we trust that you will not recommend it to such patients as are able to pay for medical services.

Members of the profession and medical students are always welcome at the Infirmary, and we hope to make the large amount of clinical material which is already collecting here, of much use for the advancement of medical science.

Very truly yours,

FRANK W. ABBOTT, M. D.,)
 BENJAMIN H. GROVE, M. D.,) *Surgeons in Charge.*
 F. WHITEHILL HINKEL, M. D.,)

AN INVITATION to contribute to the erection of a monument to the memory of the late Richard von Volkmann, Professor of Surgery in Halle, has been issued by a committee composed of eminent men of the medical and other professions in the old and the new world. It reminds the reader that the great eminence in science and fiction of von Volkmann has inspired his friends to erect a monument to his memory. It speaks in a forcible and touching way of his marvelous ability as a surgeon, his eminent gift of teaching and writing, which educated so many skilful disciples, of his poetry and fictitious prose, of his faith in his king and country, his humility toward God, and his love of high ideals. The coöperation of all people is asked for, high and low, rich and poor, at home and abroad. The monument will be erected in or before the clinic of which von Volkmann was the director. Contributions can be sent to any member of the business committee, or to the treasurer, Mr. Dehne, Commerzienrath in Halle (Saale), Germany. It is to be hoped that this appeal will meet with a generous response on the part of all who have known or felt the influence of this undisputed master of surgery.

THE Alvarenga Prize, of the College of Physicians of Philadelphia, consisting of one year's income of the bequest of the late Senor Alvarenga, of Lisbon, has been awarded to Dr. R. W. Philip, of the Victoria Dispensary for Consumption and Diseases of the Chest, Edinburgh, for his Essay on Pulmonary Tuberculosis, which will be published by the college.

THE Therapeutical Apparatus of Peroxide of Hydrogen (medicinal) and Glycozore, is the title of a neat and useful pamphlet published by Charles Marchand, chemist, a graduate of the Central School of Arts and Manufactures of Paris. In this brochure is considered *the treatment of diseases caused by germs, bacteria, and microbes.*

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No. 2.

Original Communications.

ATELECTASIS PULMONUM.¹

By IRVING M. SNOW, M. D.,

Lecturer on Diseases of Children, Medical Department University of Buffalo, Physician to Children's Department Fitch Dispensary, etc.

THESE two words signify the imperfect expansion of the lungs. Atelectasis Pulmonum is commonly known as collapse of the lungs. Now, collapse of the lungs is an exceedingly frequent condition in infancy or childhood, and may be observed in two entirely distinct phases, viz., congenital and acquired.

CONGENITAL COLLAPSE.

1. The lung tissues may never be fully expanded, as in children who are born asphyxiated. Here the pulmonary tissue remains in the fetal condition and the atelectasis is congenital.

2. Collapse of the lungs is observed in older children when the pulmonary tissues have for some time executed their normal function. In these cases areas of lung tissue become consolidated and impervious to air, and return to conditions found in fetal life.

Now, when I speak of pulmonary collapse, I do not mean that a whole lung falls together or that an entire lobe becomes dense and airless. Pulmonary collapse makes its appearance in scattered foci generally throughout both lungs, and at those regions of the lungs where the air enters last. Collapse of lung tissue takes place in children when air ceases to enter a lobule or group of lobules.

Thus there are two distinct causes:

1. An obstruction in the bronchial tubes which prevents the entrance of air into the alveoli. Hence, we see collapse of the lung in new-born children, whose bronchial tubes are full of blood and amniotic fluid, or again in older children with bronchitis. They

¹ Read before the Buffalo Pathological Society, July, 1889.

cannot cough up the inflammatory secretions past the glottis, hence the finer tubes are blocked with bronchial secretion.

2. The second cause of pulmonary collapse is weakness of the respiratory muscles. We see collapse of the lung in premature children, and in children exhausted by diarrhea, or any acute or chronic disease.

Very commonly these two influences operate together. There is secretion in the bronchial tubes, which cuts off the air. The child cannot dislodge the obstruction, because it is too weak to cough it up. Air can no longer enter the pulmonary lobules. The residual air is quickly absorbed by the blood, the pulmonary tissue falls together, and the air spaces become obliterated.

Now, the subject of atelectasis or collapse of the lungs is a very important one in childhood:

1. Because very often your first efforts in pediatric practice is to resuscitate a newly born infant.

2. Because collapse of the lungs is exceedingly frequent in later childhood. It is an almost invariable complication of any serious pulmonary inflammation — bronchitis, catarrhal pneumonia, and whooping cough; and, aside from respiratory diseases, children debilitated from any exhausting malady — diarrhea, indigestion, or typhoid fever — may suddenly exhibit alarming symptoms of dyspnea and respiratory failure, which are apparently due to pulmonary inflammation, but which are actually due to collapse of the lungs.

I will first refresh your memories concerning the asphyxia of newly born children — atelectasis where the lungs have never been fully expanded.

These children enter the world under very disadvantageous auspices. They are either prematurely born or have suffered from a delayed and difficult labor.

Asphyxia is the direct result of the inability of the infant to fill its lungs, and is occasioned by a congenital weakness or by a mechanical obstacle. We observe asphyxia neonatorum in feeble, debilitated infants after breach presentation, prolapsus of the cord, placenta previa, or tedious labors; anything, in fact, which prevents the free circulation of blood through the placenta to the fetal heart, may cause asphyxia. Now, as long as the child's blood is fully oxygenated by osmosis from the maternal blood, there is no stimulus to the respiratory centers in the medulla oblongata, and the child makes no effort to breathe; but as soon as the oxygen is cut off by

pressure upon the umbilical cord, the child must use its lungs. Now, if the placental circulation is cut off while the child's head is still in the parturient canal, it sucks into its air-passages blood, meconium, or amniotic fluid, though very little air.

When the baby is born with its lungs unexpanded or full of fluids, it exhibits very few signs of life.

A baby which is normally developed will commence to cry and twist about as soon as it reaches the external air. Its lungs are thus fully inflated, and its skin, being filled with oxygenated blood, is of a brick-red hue. An asphyxiated child lies very quietly, gasping feebly for breath; sometimes not breathing at all. The skin is livid and purple, the pulse slow and weak, and it makes only languid movements of its limbs. This is the so-called *asphyxia livida*.

If your efforts at resuscitation are not successful, the pulse grows quick and almost imperceptible, the child becomes perfectly limp, all the muscles are relaxed. The complexion instead of being purple is pallid. This constitutes the second stage of asphyxia—*asphyxia pallida*. Unless you can get the child to fill its lungs, it will show convulsive movements and probably die.

These cases either improve or perish in a few hours. But by well-directed treatment you may often establish a kind of imperfect respiration in which the lungs are only partially expanded. Your little patient will lie very quietly in its mother's arms or in the cradle, breathing rapidly. Respiration is difficult and ineffectual. If you watch the movements of the chest you will observe that the anterior portion of the chest recedes in inspiration; that is to say, that where the ribs join the sternum there will be a deep groove when the baby inhales. The abdomen and sternum instead of being protruded sink inward during inspiration. Recession of the cartilaginous portion of the chest and epigastrium simply indicates that air is mechanically hindered from entering the air cells, and is as common in croup as in collapse of the lungs.

This symptom is explained as follows: The diaphragm contracts and enlarges the cavity of the thorax; the air passages are obstructed and cannot admit air to fill the vacuum. Thus, the upper part of the abdomen and the cartilaginous part of the thorax are sucked in by the pressure of the external air.

In addition to the rapid superficial breathing and recession of the chest, the baby remains cyanosed and very weak. It may be somnolent, sleep all the time, will not nurse, and have slight con-

vulsive seizures. When you examine the lungs you will find dullness in the lower lobes, and will find certain areas in the lung where you can hear feeble respirations, or no breath sounds at all.

Now, these symptoms of dyspnea and cyanosis may continue in a child born half asphyxiated, or they may appear quite suddenly in a child two to three weeks old who seemed weak at birth, but otherwise quite normal. They are perhaps induced by slight bronchitis, by choking, or by exposure to cold. In both cases you have the same symptoms; the baby is short of breath, livid, and breathing quickly and imperfectly; the hands and feet are cold, the epigastrium is sucked in during inspiration. You find a pulsation below the sternum, due to distention and overwork of the right ventricle.

If you are called in for the first time, you are expected to explain the reason of the child's puny growth or sudden shortness of breath. It is not due to any considerable amount of bronchitis, for the temperature is normal or sub-normal, which would not be the case if there were acute pulmonary inflammation. At a first glance the livid and purple color of the complexion might cause you to suspect a malformation of the heart, but a careful examination of the lung, the discovery of dullness in the lower lobes, and feeble or absent breath sounds, will commonly prove that the cyanosis is due to imperfect lung functions or non-expanded lung tissue, and not to congenital cardiac disease.

Yet I am bound to state to you, that to decide whether cyanosis in the first few weeks of life is due to a malformation of the heart or to unexpanded lungs is often a difficult matter. In both cases the foramen ovale and ductus arteriosus are probably open; for, when the blood is hindered in its exit from the right ventricle through the lungs, as is the case in pulmonary collapse, it flows directly from right to left auricle through the open foramen ovale in very young infants, and indeed may force open that aperture if it be already closed. If extensive tracts of lung tissue are consolidated by collapse, the foramen and ductus may remain permanently open.

I will relate to you a case which illustrates the condition of a young infant suffering from atelectasis of the lungs:

The child was prematurely born and very feeble at the time of birth. During the first week the skin became very blue and it had several attacks of intense dyspnea.

At the age of three weeks its symptoms were as follows:

It was very much cyanosed about the face and extremities and very short of breath. An examination of the lungs showed extensive dulness in the posterior part of the right lung, between the scapula and spinal column. Over this area no breath sounds could be heard, only a few moist rales. The left lung was resonant and well filled with air. There was never any fever, only cyanosis and dyspnea. The child's ill-health was evidently caused by collapse of a portion of the right lung.

A healthy wet-nurse was procured, the bodily nutrition increased by breast milk and wine, and the child made a complete recovery.

[From Meigs and Pepper — Diseases of Children.]

PROGNOSIS.

The prognosis of asphyxia in newly born children is fairly good. A vast number of these children, after good vigorous work, will begin to breathe deeply, and the danger is over.

When the symptoms of dyspnea and blueness continue, and the atelectasis seems to spread, the child is in great danger and may succumb to convulsions or intercurrent bronchitis.

PATHOLOGICAL ANATOMY.

You will find abundant explanation of the diminished or deficient lung function in infants dying of atelectasis pulmonum, if you examine the lungs. The portions of lung which are unexpanded are commonly the lower lobes, the anterior edge of the lungs about the sternum, and the right middle lobe—in short, those regions where the air enters last. They are of a dark red or purple hue, and are depressed below the surface, for the consolidation of collapse involves a shrinkage in bulk. If you cut out a portion of collapsed lung and put it in water, it will sink. To the feel, it is firm, does not crepitate, as lung tissue filled with air does. Collapsed lung is not easily torn, nor can you thrust your finger into it, as you can in tissue softened by inflammation. Bronchioles clogged with mucus and amniotic fluid. The cut surface is smooth and exudes a bloody serum. Lastly, the whole of the collapsed portion of the lung may be re-inflated, all of the air vesicles are filled, and the purple color changes into a bright red hue.

Generally the ductus arteriosus and foramen ovale are found open, as in fetal life.

TREATMENT.

The treatment of asphyxia in newly born infants is undoubtedly familiar to you all.

The mouth is to be cleared of mucus, and you should at once make artificial respiration, either by the method of Sylvester by raising the arms to the head and back again to the sides, or by the swinging method of Schultze, grasping the child by the sides of the chest and the arms and swinging it up and down.

In the failure of these means external stimulation is of great value — hot and cold water or electricity.

When respiration is established, the baby should be wrapped in cotton wool or warm flannel garments and kept very quiet.

If the baby is very weak it should by all means be fed upon breast milk, and in addition given a little wine or brandy.

Cyanosis is best relieved by laying the child upon its right side ; this position merely favoring a freer action of the heart.

When the lungs remain only partially expanded, in addition to warmth, breast milk and stimulants, you may administer tonics, as a few drops of Huxham's tincture or a solution of the citrate of iron and quinine. Warm baths, with mustard, should be regularly employed. They diminish the congestion of the lungs and cause the child to take long breaths.

Dyspnea and lividity from a sudden collapse of the lungs is treated with stimulation, spirits of ammonia, digitalis and heat. You must always remember that you have no inflammation to combat, only a feeble vitality.

ACQUIRED COLLAPSE.

Collapse of the lungs in later years is called, in distinction to the congenital form, acquired collapse.

This condition is most interesting, because it was formerly confused with catarrhal pneumonia and capillary bronchitis, and was treated as an inflammation of the lungs. It is caused by the same factors as atelectasis of the lungs in early infancy, by obstruction in the smaller bronchial tubes preventing the entrance of air into the alveoli, and by weakness of the respiratory muscles.

Pulmonary collapse seldom appears, except in children that are congenitally weak, or in those who are exhausted by diarrhea or various acute diseases. It is very common in rickety babies. Here the tendency to pulmonary collapse is greatly favored by the weakness of the respiratory muscles, the softness of the ribs, and the great liability of rickety children to pulmonary inflammation.

You will, however, most frequently observe collapse of the lung in children who are suffering from bronchitis, catarrhal

pneumonia, and whooping cough. The cause is purely mechanical. All pulmonary inflammations are accompanied by more or less secretion. The bronchial tubes are full of mucous, which often a feeble child cannot cough up and expectorate. In this case the smaller bronchial tubes become plugged with mucous, which the child cannot dislodge by coughing. Air ceases to enter the air-lobules, the residual air is absorbed by the blood, and the whole tract of lung supplied by the obstructed bronchioles becomes airless and consolidated. When the bronchitis is intense and the child very weak, extensive areas of lung may quickly become collapsed. Although collapse will spread rapidly through the lung, it may also, under favorable circumstances, very quickly disappear. By vigorous stimulation, or by an emetic, you may dislodge the mucous plug, the lung will again become permeable to air, and all of the physical signs of consolidation will pass away in a few hours.

Collapse of the lung makes its appearance in the course of bronchitis in about this fashion:

A child of two years has a temperature of 100°; respiration, 35; pulse, 120; and a frequent harrassing cough. On your next visit you may find the child much worse. The mother states that it has coughed badly in the night and seemed very short of breath. You observe that the child is bluish about the mouth, is breathing at the rate of 100 to the minute, has a quick pulse, and is restless and panting.

When you examine the lungs you find recession of the anterior portion of chest during inspiration, slight dulness along the back of the thorax, auscultation over the areas of dulness, you hear faint breathing or no breath sounds at all. Sometimes there is distinct bronchial breathing, caused by a mass of collapsed lung lying around a bronchial tube.

This sudden change for the worse is often quite perplexing.

The degree of respiratory distress is greater than would be accounted for by the amount of bronchitis present. You might suspect that a pneumonia had complicated the bronchitis, were it not for the fact that there is no rise in temperature. Instead of the child being flushed and feverish, it is cold and livid.

Here the acute dyspnea and cyanosis is caused by collapse of lung tissue, from accumulation of mucous in the lungs and violent, ineffectual coughing. The dulness and faint breath sounds are caused by the consolidation and obliteration of a number of air lobules.

Now, this clinical picture is by no means infrequent. You will often see it in children under eighteen months suffering from bronchitis, and I sincerely hope you will carefully examine your cases and not diagnosticate collapse of the lung as pneumonia.

Nevertheless, some degree of pulmonary collapse is the rule in catarrhal pneumonia. With almost every death from catarrhal pneumonia, the fatal issue is caused as much by collapse of lung tissue as by inflammatory consolidation. We may judge of the appearance of collapse in pneumonia when there is a great increase of dyspnea and evidence of spreading consolidation, without a rise in temperature. In catarrhal pneumonia, as new lobules are attacked the fever should increase, but here we have diminished lung function without a higher temperature.

The physical signs in catarrhal pneumonia with collapse are obscure and puzzling. Now, ordinarily in catarrhal pneumonia you hear a variety of moist rales, with roughened or slightly bronchial breathing. When pneumonia is associated with collapse the signs in auscultation are exceedingly variable. At one time you will hear moist rales, with bronchial breathing. Next day you will hear scarcely any breath sounds at all, and at the end of twenty-four hours you will perhaps hear roughened breathing again. It is the shifting of the signs of consolidation that marks the course of collapse in catarrhal pneumonia; lung tissue is quickly collapsed and quickly reinflated.

Whooping cough is exceedingly apt to be associated with collapse of the lung. At the height of the disease there is commonly some bronchitis and violent paroxysms of coughing.

If the cough is very hard and there be much inflammatory secretion in the lungs, a child is fortunate that has not some pulmonary atelectasis.

Sometimes the symptoms are quite trivial. A child coughs very hard and lies panting and cyanosed for a few hours.

More often collapse of the lung leads to a serious condition, as in the case which I will relate:

The child was a well-nourished, breast-fed baby of twelve months.

It had suffered for seven weeks with whooping cough, complicated by diarrhea. For three or four days the coughing spells had been very severe and left the child very much exhausted. One day at noon the child coughed very hard and soon after became unconscious. I saw the child at two p. m. It was lying limp upon its mother's lap. Respiration, 80 to the minute; pulse, 140; temperature, 99°.

I examined the chest and found slight dulness in the right axillary region; over the rest of the chest the resonance was normal; auscultation revealed faint breath sounds with distant bronchial breathing in the right axilla. In the left lung respiration was rough and harsh, while the vocal fremitus was equal on both sides.

There was no cardiac murmur.

The child was pallid and cold, with slight blueness about the mouth. I diagnosticated collapse of the right lung.

Next day the temperature, 99; pulse, 140; the breathing was rapid and very irregular, approaching the Cheyne-Stokes rhythm.

On the fifth day temperature and respiration were about the same. The pulse was weaker. There were now coarse creaking rales heard in both lungs. I discovered dulness in the right chest, both in front and behind. During inspiration there was retraction of the epigastrium; child coughed violently. I inferred that more of the lung tissue was collapsed and that the child had now a bronchitis. The child showed no improvement until the eighth day, when the dyspnea subsided somewhat. The respiration sank to 60 to the minute; pulse, 130; temperature, normal.

Both lungs were full of creaking rales, but I could now hear the respiratory murmur in the right lung.

The baby appeared hungry and nursed very well. During the illness two molar teeth made their appearance.

The baby now made a rapid and complete recovery.

This was a typical case of collapse of the lung during the course of whooping cough. Two very interesting features were the intense dyspnea and the total absence of a febrile temperature. All cases do not run so favorable a course. Nearly every fatal case of whooping cough is associated with collapse of the lungs. It must be remembered that more deaths are returned each year from pertusis than from typhoid fever.

The prognosis, with the acquired form of pulmonary collapse, is always serious:

1. Because it always occurs in weak and exhausted children.
2. Because it is commonly a complication of acute pulmonary disease where the breathing function is already badly impaired. When collapse occurs, large tracts of lung are rendered practically useless.

Hence, pulmonary collapse always increases the dyspnea and adds greatly to the dangers of heart failure, by causing distention and exhaustion of the right ventricle of the heart.

PATHOLOGY.

The pathology of the acquired form of lung collapse is about the same as the congenital atelectasis. It is important to distinguish the condensed lung tissue of collapse from the inflammatory consolidations of catarrhal pneumonia. With collapse there is no pleurisy, a frequent complication of pneumonia. A collapsed lung can be reinflated with air, while lung tissues glued together before inflation resist all efforts at inflation. Wherever there is collapsed lung, the surface of the lobe is blue or violet, and the cut surface of a pneumonic lung is granular, and plugs of exudation can be squeezed from it. Collapsed lung when incised looks like muscle, and only bloody serum can be squeezed out of it.

Foci of collapse may be scattered all through the lungs, but its favorite seat is on the lower lobe, or on the anterior edge below the sternum. When much of the lung consolidates, there is commonly some emphysema.

TREATMENT.

The treatment of the acquired form of collapse must vary as the condition is due to mere malnutrition, or exhaustion, or is caused by mechanical obstruction of the air tubes.

A child with collapsed lungs should be placed between flannel sheets, clothed in flannel garments, and kept in a warm, even temperature of 70 to 75°.

It must be nourished frequently and abundantly with breast milk, if an infant; older children, with milk and easily-digested broths. Reed & Carnrick's liquid peptonoid is an excellent thing to give. It contains digested beef essence, alcohol, and a small amount of farinaceous food. Stimulants should always be administered, either brandy, wine, Huxham's tincture, or elixir of calisaya.

When collapse of the lung is a complication of bronchitis or of pneumonia, you must stimulate and give remedies which liquify the inflammatory secretions and aid in expectoration. These remedies are Hoffman's anodyne, spirits of ammonia, carbonate of ammonia, spirits of Mindererus, and syrup of senega. Emetics may sometimes be given with great advantage. When a child with bronchitis vomits freely, it sweeps out all of the mucous from its lungs, and may free the collapsed portions from their obstruction. Yet they are rather hazardous remedies, for emesis may be followed by a depression so grave that a child may not rally from it.

I believe that counter-irritation, persistently employed, is very serviceable in pulmonary collapse. Poultices of flour and mustard, or flax-seed poultices sprinkled with turpentine, are what I commonly employ. They should be applied fresh every three hours, and supplemented with warm baths.

I have now rehearsed the character of collapse of the lung in its various phases. I strongly urge you to familiarize yourself with its symptoms. A knowledge of pulmonary atelectasis, as seen in young children, will clear up many a puzzling case for you, and will explain many obscure and confusing symptoms in the pulmonary diseases of childhood.

371 PORTER AVENUE.

Clinical Reports.

ON A TEMPORARY SUBSTITUTE FOR MILK IN THE FEEDING OF INFANTS.¹

BY DELANCEY ROCHESTER, M. D.

EARLY in March, 1890, an attempt was made to wean a girl baby six months old, because its mother's milk was insufficient. The baby objected seriously to the bottle, nor could she be induced to take food by spoon. The foods tried were sterilized milk (Meigs's Mixture), malted milk, and Carnrick's food. So determined was the objection on the part of the baby to artificial feeding, that she cried and fretted so much at each feeding time as to cause a considerable rise of temperature and vomiting of everything except breast milk. Her temperature ran as high as 104° F. in the groin. The stools were not very frequent, nor very bad in character.

After all attempts at artificial feeding had proved worse than useless, a wet-nurse was procured and the baby again flourished. After the fever had subsided and the vomiting had ceased, the baby broke out in an eruption that was as similar to the measles eruption as could be imagined. The eruption did not irritate her and disappeared in a few days.

About June first the wet-nurse's milk began to give out, and partial artificial feeding was begun, Meigs's milk and cream mixture, sterilized, being the food employed. On this the baby did well.

¹ Read before the N. Y. O. G. Soc. at the meeting of Nov. 2, 1890.

The wet-nurse's milk having given out entirely by the end of a week, the sterilized milk was used alone. For two weeks the baby gained in every way — weight, firmness of flesh, quiet sleep, and happy waking hours. Then the stools began to show curds; but as in every other respect the baby was doing well, nothing was done for this. The last day of June and first of July were excessively hot days, and the baby wilted completely — feverish, restless, fretting, and finally vomiting. Stools remaining as they had been for about a week previous, of good color, but containing curds.

By the advice of Dr. Hopkins she was given sodium bromide to quiet her restlessness, and cool baths to reduce her fever. Nevertheless, she vomited every time that milk was given to her. Finally, she was given toast water and white of egg for twelve hours, with no vomiting. At the end of that time a little malted milk was tried, but she retained it not more than five minutes, when she vomited profusely.

I then began to think what I could give her temporarily as a food until the hyperemia of the stomach should subside and she could again take milk in some form.

White of egg and toast water given cold I knew she could take, so I thought I would look up exactly the composition of egg, and see whether by some addition I could not make a food that would supply all the necessities for life and growth. In Routh's *Infant Feeding* and Landois' *Physiology* I found two analyses of egg — white and yolk — that substantially agreed. I give the percentage composition of yolk of egg, as given by Landois:

Water.....	51.5
Proteids.....	15.0
Fats, etc.....	30.0
Mineral matter.....	1.4
Pigment extraction.....	2.1

A glance at this will show that the albuminoids and fats bear about the same relation to each other that they do in human milk. The problem then before us is to dilute the yolk of egg sufficiently with water to make the actual proportions the same as in milk. To do this, of course, it was necessary to obtain the weight of a yolk of egg. I weighed several, and found that each weighed about one ounce — some a little less. Calculating, then, on the total weight of the yolk as one ounce, and remembering that it contained 51.5 per cent. water, to reduce the fifteen parts albumin-

oids to two parts, it was necessary to add seven ounces of water to the one yolk of egg. The amount of sugar in yolk of egg is very slight, being included in the "etc." added to fats in the above analysis. So, to bring the sugar up to the required amount, it was necessary to add sugar of milk. As there is normally seven per cent. sugar in human milk, this would mean in eight ounces a little over half an ounce. This would make a mixture by weight consisting of :

Yolk of egg	1 oz.
Water	7 oz.
Sugar of milk	$\frac{1}{2}$ oz.

For the convenience of the household I always make these proportions by volume, so I measured the half ounce of sugar of milk and found that it filled six teaspoons in an ordinary medicine glass, so the following formula was prepared :

Yolk of egg	No. 1
Sugar of milk	6 teaspoonfuls.
Filtered water	7 oz.

Dissolve the sugar of milk in the water and add gradually to the yolk of egg, stirring constantly.

This was fed perfectly cold, in small quantities at a time, for twelve hours, gradually increasing the amount and lengthening the intervals, until finally the full amount was given four times in the twenty-four hours. I once tried warming it slightly — not enough to coagulate the albumen — but the baby objected to it warm, so that was not tried again.

The baby retained this food from the first. After I began with this food it was no longer necessary to give the sodium bromide, but the baths were kept up, three or four being given daily. She was dressed very lightly and made as cool as possible. Luckily the weather also changed and we had three or four cool days. For sixty hours she lived on the egg food alone. During this time the fever left her entirely, and she again broke out in a copious rash, as much like measles as the previous one. At the end of the sixty hours, as she began to show dislike for the egg food, I tried again the malted milk. She retained it and seemed very fond of it. So it was gradually substituted for the egg food, and for the last eight or ten days the baby has lived on malted milk alone, and thrives on it.

The peculiarity of this case is that the stomach was the seat of the chief trouble, the intestines being little, if at all, involved. The peculiarity of the rash, and the great extent of surface that it covered without causing any irritation, is also deserving of mention. The advantages of this egg food, that has been suggested, are that it contains all the necessary ingredients for life and growth in the proportions in which they exist in human milk, although in somewhat different form; that it must be given cold, and that it is slightly laxative.

I say that it is an advantage that it must be given cold, as I think that it thus has a beneficial action in overcoming the hyperemia of the stomach, and thus prevents further inflammatory developments. It is an advantage that it is slightly laxative, for it thus aids in the discharge of any milk curds that might be in the bowel ready to set up irritative action. This is really a great advantage, for in the congested state of the stomach this baby was unable to retain any laxative medicine, even calomel in small doses being rejected.

469 FRANKLIN STREET.

Society Proceedings.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Regular Meeting, June 25, 1890.

THE president, Dr. John B. Roberts, in the chair.

THE RECOGNITION OF EYE-STRAIN BY THE GENERAL PRACTITIONER.

BY EDWARD JACKSON, M. D.,

Professor of Diseases of the Eye in the Philadelphia Polyclinic.

The attempt to give relief from the symptoms of eye-strain by a careful trial, seriatim, of one's favorite sedative, tonic, and alterative prescriptions, followed by experimentation with the formulæ of great professors found floating on the surface of medical journalism, does not usually bring much comfort to the patient or credit to the doctor. And that it is so frequently persisted in until the patient deserts his so-called medical adviser, and of his own notion takes his chances with the specialist or the charlatan, seems to argue an inability to recognize the connection of this group of symptoms

with their cause. The worst evil of specialism is ignorance and indifference as to other departments of medicine; one of the most aggravated manifestations of this evil is the expressed indifference of so-called "general practitioners" toward the anomalies and diseases of the eye.

From time to time efforts have been made by ophthalmologists to secure a more general recognition of eye-strain on the part of the mass of the profession; but usually these efforts have consisted in a recommendation of some special instrument or procedure of diagnosis, as the refraction ophthalmoscope, or the shadow-test, or a set of trial lenses reduced in size and price to the supposed needs of the mass of the profession. If it were really necessary to apply such special means of diagnosis in order to recognize the presence of eye-strain, there would be little prospect of its early general recognition. But it is frequently recognized by the patient himself, and the ophthalmic surgeon finds in the general rational symptoms quite sufficient grounds for a provisional diagnosis; hence, if the mind is clear from preconceived hypotheses as to the causes of the symptoms, tending to divert attention from their real origin, there is no reason why anyone respectably qualified for general practice of medicine should not be able to make a provisional diagnosis with sufficient certainty to serve for the basis of further investigation and treatment, in the great majority of cases, without resort to any special method of examination whatever. Of course, the ophthalmoscopic evidence of ametropia, when it can be obtained, is very valuable as confirming such a diagnosis; and I do not underestimate the value of the ophthalmoscope to the general practitioner, for I cannot regard anyone who is unable to use the ophthalmoscope as properly qualified for general practice. But I do say that inability to measure refraction with the ophthalmoscope is no reason for failing to recognize eye-strain.

The patient suffering from eye-strain comes with a certain history and certain complaints, which, carefully considered by the light of a very moderate knowledge of the subject, clearly indicate the cause of the trouble, in the great majority of cases. The symptoms in question may be considered separately.

1. *Impairment of vision*, either quite temporary, more prolonged, or quite permanent. A very characteristic form of temporary impairment of vision is that due to sudden relaxation of the accommodation. This occurs when the ciliary muscle has long been overtaxed, and especially in the latter hours of the day, when it is nearly

tired out. The patient notices that the print or other near object on which the attention is fixed suddenly becomes entirely blurred, compelling the cessation of the eye-work. After a moment, however, the power of again focusing the object returns, and work can be resumed. The patient is apt to close his eyes for an instant, and, perhaps, rub them, and on again opening them finds the sight again restored. If the eye-work is continued, the failure of accommodation recurs, to again rapidly pass away; and keeping on with the eye-work, these periods of inability to see become more and more frequent, until, finally, they greatly interfere with the continuance of the work or quite prevent it. This form of impairment affects only the vision for near work.

Another temporary impairment is that due to spasm of the accommodation: it affects distant vision only, and is noticed chiefly by those whose distant vision is otherwise pretty good. It comes on after prolonged straining of the eye, usually for near vision, and lasts until the eye has become well rested. It is a valuable danger signal, and should secure cessation from the work which produced it until it has given place to normal relaxation. Permanent impairment of vision is brought about when eye-strain causes myopia or decided permanent damage of the choroid and retina.

2. *Headache and aching of the eyes.*—Eye-strain should be the first thought suggested by any complaint of headache, for in our day and civilization it is by far the most common cause of that symptom. It enters as a factor into the causation of nearly all headaches not due to pyrexia, toxemia, or diseases of the brain or its membranes. The simple existence of headache, therefore, should suggest eye-strain; but frequently a careful inquiry as to the manner and time of occurrence of the attack, and the location of the severest pain, will be almost conclusive as to the origin of the trouble.

Often it comes on whenever the eyes are used, and is absent when they have had a proper period of rest. The occasions of most severe requirement in the direction of eye-work are the doing of anything requiring accurate near vision, taxing both the accommodation and the convergence; or traveling, shopping, attendance at public gatherings, which entail more use of the eyes than the patient is at the time conscious of, and often under unfavorable conditions.

Very often the chronological connection between the use of the eye and the occurrence of the ache, although perfectly certain and

evident when once it has been observed, has never been noted by the patient until his attention has been directly called to it. Even when the headache seems constant and quite uninfluenced by variations in the amount of eye-work, it may be due wholly to eye-strain.

In hyperopia in young people the accommodation is in excessive use so long as the eyes are open and the attention fixed on any visible object; and hyperopia is the most common cause of constant headache. The writer was formerly subject to a constant headache whenever confined to the house, and regarded it as caused by breathing vitiated air, until it was quite cured by the correction of his hyperopic astigmatism. Many persons have the same idea as to the causation of the headaches they always experience when attending the theatre or other place of public amusement, and which are really due to eye-strain. Others ascribe these headaches to exhaustion, especially those experienced in traveling or shopping. This is nearer the truth, only they commonly have in mind a condition of general exhaustion, whereas it is largely one of local exhaustion of the special nervous apparatus concerned in the act of seeing.

The *location of the aching* is of some significance. Generally it is frontal, often described as beginning in the eye, or just back of the eye, or through the temples. Frequently it extends to the occipital region, and may sometimes be felt principally or wholly in that region. Headache most severe in the vertex or confined to that region is probably not very common from any cause, but from eye-strain it is almost unknown. Often the headache is more severe on one side of the head than the other. Sometimes it is entirely confined to one side, but usually it is bilateral.

Those more or less regularly periodical headaches, known as nervous or sick headache, migraine, or, when confined to one side of the head, hemicrania, are in many cases set up by eye-strain and relieved by its removal. Attacks of this kind are frequently ushered in by certain interference with vision and subjective sensations of light, affecting a part or the whole of the visual field, and known as ophthalmic migraine. These visual disturbances are simply a part of the general "nerve-storm," and it is not certain that they especially indicate the origin of the attacks to have been eye-strain.

3. *Congestion, irritability, or inflammation of the eyes and their appendages* should always suggest the suspicion of eye-strain.

A single attack or manifestation of this kind has no especial significance, but repeated attacks of inflammation, or prolonged congestion or irritability, are exceedingly suggestive of a continuing cause; and the most common of these is the one now under discussion. No case of chronic inflammation of the margins of the lids, or of recurring conjunctivitis, or repeated styes, has justice done to it until it has been carefully investigated for eye-strain. Persons at the period when they begin to feel the effects of loss of accommodation in presbyopia or absolute hyperopia, suffer from repeated attacks of conjunctivitis, which they commonly ascribe to "taking cold in the eye," but which are cut short by use of the appropriate lenses, and which, if unchecked, would tend to establish a chronic catarrhal condition, which is a chief discomfort in the lives of many elderly people.

Of course, these conditions of ocular congestion and inflammation will be recognized by the usual symptoms of redness, swelling and itching, smarting or burning pain. They often require especial local treatment, and will quite often be temporarily cured by this alone; but if the underlying cause is not removed, they show a strong tendency to recur indefinitely, or until the accommodation is so far lost that the temptation to strain it is removed. It should be noted that usually headache and these local inflammatory conditions are not presented by the same case. They may co-exist, but, more commonly, if one is decidedly present, the other is absent.

So far, nothing has been mentioned for the diagnosis of eye-strain but the facts ascertained by questioning the patient and from simple inspection of the eye. If, now, the physician's office contains — what every general practitioner's office should contain — a card of test letters for accurately ascertaining the distant vision, and a card of fine print for ascertaining the near point of the eye, additional valuable evidence is easily obtainable. The trial of the distant vision will give indication of any considerable degree of myopia or astigmatism. But it must always be borne in mind that troublesome ametropia may be present without preventing perfect distant vision. The position of the near point, if farther from the patient's eye than his age would indicate, is pretty good evidence of the strain of the accommodation. Evidence of strain of the external muscles of the eye, heterophoria, can be obtained by simply getting the patient to keep his eyes fixed on some object, near or distant, and covering one eye, then noting whether the

covered eye deviates from its position of fixation, and especially whether it makes a quick movement to return to that position when it is uncovered.

To recapitulate, briefly, the common symptoms of eye-strain are :

1. Certain forms of impairment of vision.
2. Headache, which is to be studied with reference to the times of its occurrence and the parts of the head to which the aching is referred, with careful discrimination between the patient's facts and his theoretical explanation of them.
3. Chronic or repeatedly recurring congestion, or inflammation of the eye or its appendages.

And, if, to these symptoms are added the results of the simple tests of near and distant vision, and evidence of tendency of the eyes to deviate from their normal position when covered, a very good basis is furnished for the probable or provisional diagnosis of eye-strain, without recourse to any special apparatus or unusual diagnostic procedure. And, in view of these facts, there is no justification for the general practitioner who fails to recognize most of the numerous cases of eye-strain with which he is brought in contact.

DISCUSSION.

DR. GEORGE M. GOULD: Certainly nothing Dr. Jackson has advanced in his excellent paper calls forth controversy or criticism; but I think a word may be added as to certain other symptoms not alluded to by him, that may sometimes put the general practitioner on the track of an eye-strain reflex. When eye-strain is sufficiently severe to set up a reflex neurosis, sleepiness is a common symptom brought on by persistent reading or writing. The patient cannot understand why he grows so drowsy. A more important trouble is one I at first advanced somewhat doubtfully, but now, I am growing perfectly convinced, is a genuine result of ametropia. I allude to troubles of appetite and digestion. Few patients with severe or long-continued eye-strain that do not complain of anorexia, fickle appetite, or some dyspeptic trouble. Mothers frequently call such girls "pickers." Explain the mechanism of this reflex as we may, I am sure it is a fact, and that a malnutrition often results that may end in anemia and many different forms of nervous abnormality. I have had a large number of such patients regain long-lost appetite after putting on glasses, and regain ten to twenty pounds of flesh within a month or two. Nervousness and choreic movements even genuine choreas are traceable sometimes to the same causes. I had one patient who wore the right shoe out in a few weeks, and who had a habit of bursting out crying or into a rage at a

trifle. She had been treated for chorea for years at one of our best hospitals. All symptoms have disappeared for two years upon correction of her hyperopic astigmatism. I could cite several other cases.

I should like also to call attention to car-sickness in connection with eye-strain. I have had eight or nine cases of this kind, and by glasses all have been relieved of the car-sickness. One case was that of a gentleman who had car-sickness every journey. While he had the mydriatic in his eyes he went to Washington, and suffered no inconvenience whatever. Subsequently, after he had glasses, he made a trip to St. Paul without any of the former trouble. In the last two days I have had two cases—one that of a girl who could not ride a short distance in the street cars without vomiting. I found a decided degree of hypermetropic astigmatism. With the mydriatic in her eyes she rode home without her usual trouble.

A strange thing with reference to eye-strain is, that it often exists to an exceptional degree without showing any symptoms in the eye. The patient will often say that the eyes are perfectly good and have never caused any irritation. The reflexes seem to settle in some other place. This is an interesting pathological and physiological question.

With reference to testing the eyes by the general practitioner, it has struck me that a simple plan, which could be readily carried out, would be as follows: Have two test-cards, so that the patient will not learn and remember the letters. Let him first test distant vision with one of the test-cards; then let him instil homatropine. This will give perfect paralysis in three-quarters of an hour. Now retest with the other card. Then, if vision has decreased, there is eye-strain due to astigmatism or hypermetropia. Another practical point is that, if the patient is suffering with headache, he will be relieved by the application of the mydriatic. It is as to the existence of hyperopia and astigmatism that we want to know. Myopia rarely produces eye-strain.

Dr. MARY E. ALLEN: I would ask if, in these cases, the condition of the recti muscles has not something to do with the symptoms. In my own case I suffered eye-strain for a long time with insufficiency of the recti muscles. I had one symptom which I have never seen described, and that is a feeling as though a blow had been struck against the eye. My explanation of this is that, by a spasmodic contraction of the straight muscles, the elastic eye-ball is suddenly drawn with force against the back of the orbit, giving the sensation of a blow. I had this a long time before wearing glasses, but very seldom since.

Dr. JACKSON: My paper simply refers to the *recognition* of eye-strain. I purposely considered only those symptoms most generally present, and had in mind the great mass of cases, not the exceptional ones, which do, in the aggregate, constitute a very large number, but still are proportionately few. The other symptoms which have been mentioned, and many others, might be referred to as due to eye-strain.

but they do not occur in the large number of cases, and can hardly be regarded as of general importance in making the probable diagnosis.

I have used the term eye-strain, not as a synonym of ametropia, because we may have ametropia without eye-strain, or eye-strain without ametropia, if requirements are put upon the eye too great for its capacity. You can have it without any ametropia or weakness of any extra-ocular muscle or group of muscles. It is to the question of eye-strain as isolated and separated from ametropia that I refer. Of course, in a very large proportion of cases, the relief of the eye-strain comes from correction of the ametropia.

In connection with that correction, I should like to say one thing with reference to a remark made by Dr. Gould—that is, if myopia were present it need not be considered. In my experience, myopia may cause severe eye-strain. There is the strain of convergence, and any inequality between the two eyes in the amount of myopia—and myopia is usually unequal—is very likely to cause eye-strain. The discovery of myopia would not, to my mind, rule out the existence of eye-strain.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Reported by W. H. BERGTOLD, M. D., Secretary.

THE regular monthly meeting was held in the parlors of the Iroquois hotel on Tuesday evening, August 5, 1890.

The president, Dr. A. A. HUBBELL, in the chair.

Dr. F. THOMAS was elected to membership.

The following papers were read:

HAY FEVER—ITS ETIOLOGY, PATHOLOGY, AND TREATMENT.

BY F. WHITEHILL HINKEL, M. D.

Chief Professor of Ophthalmology, Medical Department University of Buffalo.

AND

FRANK HAMILTON POTTER, M. D.

Professor of Ophthalmology, School of Medicine, Medical Department, University of Buffalo.

I.

THE ETIOLOGY AND PATHOLOGY OF HAY FEVER.

BY F. WHITEHILL HINKEL, M. D., Buffalo, N. Y.

IN THE past decade there has been much discussion of the essential character of hay fever and of its cause or causes. The classical investigations of Haywood in '72, Blackley in '73, and Beard in '73, established the fact that the disease is due to the pollen of

various plants, and that only individuals of a neurotic temperament are affected. In '81 Daly advanced the statement that these cases present chronic diseased conditions of the nasal mucous membrane, the cure or relief of which relieved the attacks of hay fever. His observation of the relationship between diseased nasal conditions and hay fever was soon corroborated by scores of observers. A limited number affirmed the curative effect of intra-nasal treatment.

Two main pathological theories of undeniable and demonstrable conditions have sprung from these observations. The one regards hay fever as a pure neurosis, with exacerbations of a regularity similar to the periodicity that marks all nervous manifestations, physiological or pathological — as sleep, chills, etc. The other holds the manifestations of the hay fever paroxysm to be reflex from diseased intra-nasal conditions. The difference in methods of treatment to which this leads is obvious. Unfortunately these pathological theories, unlike the observations from which they spring, are not demonstrable. A post-mortem examination rarely includes in routine the nasal chambers, and hay fever victims live to suffer another day. I know of no record of a minute post-mortem on such a case.

Deductions from the results of treatment based on the one or the other hypothesis must be received with much allowance. We know that neurotics are enormously susceptible to suggestion, expectation, moral impressions, etc. Temporary improvement follows not infrequently in this class of cases from the most illogical and irrational procedures. Hence, because certain intra-nasal operations relieve certain cases at certain times, or for a certain time, it does not follow they will relieve all cases for all time. On the other hand, a change of residence to now well recognized localities, almost invariably gives relief to all cases. But, strange to say, all cases are not relieved by residence in the same locality. The influence is selective, so to speak, and each case is a law to itself outside of certain limits. This militates strongly against the pollen of any one plant being the sole exciting cause. And similar atmospheric conditions neither excite nor relieve all cases, as is well recognized in the kindred neurosis, asthma. A moderate view, which seems to be the wise one, in the elucidation of apparently discrepant phenomena reported by good observers, was formulated by Sir Andrew Clark in '85, and now generally accepted. It combines both hypotheses into a working theory, along the lines of which, in my opinion, the

best results in treatment are to be obtained. According to this theory we have (1) a neurotic temperament, inherited or acquired ; (2) a local condition of irritability or disease ; and (3) an external exciting cause. This theory gains confidence from its comprehensiveness. It is applicable to any neurosis, or any reflex disturbance in any region.

The "golden mean" of opinion, then, holds that for the production of hay fever there must be present a neurotic constitution. The wider the investigator's range of observation, the firmer he holds this truth. The inferior races of men are not subject to this disease, or only with extreme rarity. It is confined largely, in the white race, to those whose nervous systems, environment and heredity have been "forced" in the hot-bed of modern life.

Next in importance in determining how the nervous explosions will manifest themselves to which this temperament is subject, is the local nasal disease. Often, it is a deflection of the septum ; again, a hypertrophy of the nasal mucous membrane ; occasionally a polyp ; and frequently, only a general turgescence that between the attacks is not to be called disease. Areas of special irritability, not now necessary to particularize, at times seem to be the nasal *locus minimæ resistantiæ*. Any nasal abnormality causing pressure, in my experience, is the great *local* factor in these cases. The just grounds upon which the reflex theorists urge the necessity of intra-nasal operations in many, if not a majority of cases, are obvious. If they allow the other factors due weight ; if they worship not as a fetich the saw, trephine and cautery, good, or at most no evil, follows their method of treatment.

The third factor, the external irritant, is very interesting, and, unfortunately, well nigh universal. The emanations of flowers and various forms of vegetation are undoubtedly a great factor, but dust, sunshine and probably chemical and electrical states of the atmosphere play also their part. It is hopeless to try to escape them, except in limited regions and to a favored few. The susceptibility must be overcome by removing or weakening the influence of the other factors involved. In the treatment of the staggers the least interest to us, its consideration plays but a small, though essential part.

In this paper our consideration of the first and second factors, the neurotic temperament and the local lesions and their application to each case, studied according to the conditions in presence, affords the best chances of an intelligent conception of

these interesting yet exasperating cases, and that promise results satisfactory to physician and patient.

II.

ON THE TREATMENT OF HAY FEVER.

By FRANK HAMILTON POTTER, M. D., Buffalo, N. Y.

JUST as long as the pathology of hay fever is in the present chaotic condition its treatment will be uncertain and many times most unsatisfactory. I do not mean that there is no pathology of this disease; on the contrary, there is a great deal, as the paper we have just listened to so clearly shows, but it has not yet reached that definiteness that can give us a fairly sure basis upon which to form a rational treatment. Some cases get well, —there is no doubt of that,—under careful and painstaking management, and such a result is one of great satisfaction to all concerned. Many cases, however, that have been reported as cured are really far from that condition, and could they appear here at this moment would demonstrate to you the uncertain meaning surrounding the word “cure” as it appears in our medical literature. All that we can be expected to do this evening is to show the line of treatment that should be adopted, in the light of our present knowledge, when we have to do with a case of hay fever, whether it comes to us under that plebian name, or under the more aristocratic one of rose cold, or, again, under perhaps the more scientific one of hyperesthetic rhinitis.

In the first place I desire to state that, as far as I can ascertain, no case of this disease has been cured by constitutional treatment alone. Many years elapsed between the year 1819, when the disease was first described by Bostock, and 1881, when Daly first called attention to the local lesions generally found in the nasal passages in this disease, and it is not too much to say that in all that time its treatment can be fairly described as *eminently unsuccessful*. On the other hand, local treatment alone is short-sighted and deceiving. Temporarily, its results are brilliant, but, as a rule, they do not last, and a case that has been cured in this way often returns to torment the operator and belie the statistics. It is just as bad to condemn local treatment as to condemn constitutional treatment, and the narrow generalist is as much bound down by

the green withes of a confining theory, as is he who thinks the nose is the fixed point around which all things revolve.

Broadly, then, we must look at this disease from many points of view, and consider what we have learned :

I. As to the treatment during the attack.

II. As to the local treatment ; and

III. As to the general or constitutional treatment.

By the first, we seek to palliate the severity of the attack ; by the second and third, we seek to prevent the attacks recurring. It is now very generally conceded that medical treatment should not be undertaken during the attack. The latter may be lessened in its severity in many ways, but thorough treatment should be postponed to the period of immunity.

We all appreciate to-day that change of locality will, in a large number of cases, prevent or stop an attack. This is a measure that cannot be employed by many, either on account of the expense or other reasons. When nothing prevents this indulgence, the periodical return of the disease is a most admirable excuse for a journey, and if locations can be found where the sufferer is free from it he would be foolish not to take advantage of that fact. Something can be done, however, to relieve the patient that must stay at home. He must obey, with perhaps more strict observance, the laws of personal hygiene than is necessary for one not a victim of the disease. He may be in certain directions more sensitive than others. For instance, he may take cold easily, and when this is so he should strive to make himself less liable to this, by the proper employment of the cold bath, the judicious selection of clothing, etc. Or certain articles of diet may disturb him, and then, of course, they should be avoided. We cannot repeat in detail what is so well known to the profession, but simply mention the importance of hygiene in the conduct of a case of hay fever, because we believe it has much to do with the comfort of the patient. During the attack the nasal passages are generally inflamed and very sensitive, and a watery mucus is constantly flowing from them. They should be washed out frequently with some bland, unirritating solution, and then the surfaces covered with a coating of an oil to protect them from dust. When dust or pollen is especially offensive, a small piece of fine sponge inserted into each nostril will still further protect them. Cocaine has, on account of its peculiar properties, come into almost universal use by hay fever patients. There is danger in its use, and when given

to a patient he should be told that too frequent spraying of the nose with it will very likely disturb the nervous system and produce restlessness, sleeplessness, and the like. It should be applied after the nose is washed clean, before the oil is used. A two or four per cent. solution is all that is required.

Internally a combination of atrophina and morphia is useful. They must be given in small doses frequently repeated. Sulphate of atrophina 1-200 gr. and murate of morphia 1-32 gr. is a good proportion. It has, occasionally, been my good fortune to stop or prevent a threatened attack by this treatment. Success with it, however, is not universal, and it cannot be considered a specific.

We have now to consider the management of the patient when free from the disease.

Looking first to the local treatment, we find that we must seek to relieve a general hyperæsthetic state of the nasal mucous membrane, and also in the vast majority of cases to remove lesions of an obstructive character. The means employed for the correction of the latter often serve to relieve the former, and thus it would seem that they are frequently dependent the one upon the other. These obstructive lesions are of many kinds, and may be found either of the hard or soft tissues—frequently they are of both. They may be slight and projecting or so large that they prevent breathing through the nostrils. They may be hypertrophic or neoplastic in their character. Whatever may be their organization, they should be removed. This is especially so if they cause contact between the walls of the nostrils. The pressure this contact produces is not only a source of local irritation, but causes reflex symptoms, widespread and aggravating. It is not our purpose to describe the methods now adopted to get rid of these obstructions. That belongs to the realm of the specialist. It will suffice if we are able to impress upon each one here, that these things must be looked into and corrected in order to give hay fever patients the benefit of the best treatment. We are not likely to control the disease unless this is done.

Where the operative treatment does not relieve the highly sensitive condition of the nasal mucous membrane, or again, where the latter exists without obstructive lesions requiring operations, then the hypersensitiveness can be controlled by mild and superficial alteration of the nerve ends found in the membrane. This is an important part of the treatment, frequently, in my opinion, overlooked in the management of these cases. Now, as to the general

or constitutional treatment, simultaneously with the correction of the local disease we must ascertain in a systematic manner the life history of the patient, particularly as to hereditary influences, temperament, etc. In the majority of cases we find this disease appearing in persons of the so-called neurotic habit. They may also show other departures from the normal that must be taken into account. We must consider their personal hygiene, the diet, exercise, bathing and so on. In a word, we must strive to place them in a condition of the greatest resistance. This is so easily said and so hard to accomplish, that we must frequently be content with an approach at what we aim rather than its full realization. In addition to all this, drugs have here an important place and will well repay the difficulty in finding the proper combination for any given case. Nerve tonics and alteratives have the first consideration.

Mackenzie, of Baltimore,¹ who is inclined to consider the disease as a pure neurosis, relies much upon the following formulæ :

- I. R—Zinc phosphid..... gr. 1-16.
Quin. sulph..... gr. ii.
Ext. nuc. vom..... gr. ¼.
M. Ft. pil. no I.
S. To be taken before meals.
- II. R—Liq. Arsenic, et hydrag. iodid., gtt. iii., ad v.
S. In a wineglassful of water, after meals.

These are really valuable and will indicate the kind of remedies to be employed. Besides those in the above combinations, we find recommended by various observers belladonna, hydrocyanic acid, valerian, assafetida, musk, lobelia amber, the bromides and iodides, chloral, opium and hyoscyamus. Iodine, in some cases, will be found of great value. A very pleasant way to prescribe it is in the form of hydriodic acid. The important point, as already suggested, as far as drugs are concerned, is to find the formula that will act with benefit upon a given case. This will often tax the patience and skill of the physician, but frequently after repeated trials, success will follow when least expected. One or two other things deserve mention. The cold douche to the spinal column has a decided therapeutic value in these cases; most authors from Gordon, who first, in 1829, mentioned it, to Bosworth, have regarded it with great importance. The latter author makes some pertinent suggestions as to its application. It is something more than a cold bath. The water must be dashed against the spine either by means

¹ Trans. American Neurological Association, 1896, p. 100.

of the shower bath or else by an assistant. A simple method is to sit in the bath-tub and press a sponge full of cold water over the back. The intermittent application of cold in this way acts as a general tonic to the whole nervous system. The patient feels better at once, and after becoming accustomed to it, considers the day not rightly begun without it. If this paper aimed to be exhaustive, many other details in regard to treatment would have to be studied. What has been said, however, will indicate to a slight extent the manner of dealing with hay fever cases. It is a broad subject, still far from settled. And this being so, it is becoming in any one undertaking the treatment of these patients to recognize its complexity, and above all to remember that various factors enter into it, that it has a local as well as a general element, and that the best treatment will consist of special and constitutional therapeutics combined.

DISCUSSION.

Dr. DELANCEY, ROCHESTER laid stress upon the importance of always making a local examination in cases of hay fever. The nose and throat ought to receive a thorough going over in every case. It is also a good point to remember that some cases of hay fever may be due to anemia, and to prevent this being overlooked we ought always to examine the blood if we are at all puzzled in finding the cause of an attack. Operations for the correction of any nasal error ought always to be undertaken and insisted upon. He has never had any bad results from the use of cocaine. For constitutional effects he has had the best results from the use of quinine, hyoscyamus, and opium.

Dr. J. W. GROSVENOR mentioned several cases, and spoke of one where the species of plant, whose pollen caused the hay fever attacks, differed from year to year. He had had very good results from the use of chloral.

Dr. F. W. BARTLETT had experimented with various powders, vapors, etc., and amongst others, ozone. He had used simple cream as an emolient several times, and found it to work well.

Dr. WILLARD has tried nearly everything recommended for hay fever, and had not found one applicable to all.

Dr. C. A. RING asked if electricity, otherwise than as a cautery, had ever been used as a local application to the nasal mucosa.

Dr. POTTER, in closing, said that Dr. Rochester's point concerning the relation of anemia to hay fever was a good one. He had never used electricity in the manner suggested by Dr. Ring.

Dr. ROSWELL PARK made some remarks on a recent visit that he had made to Pasteur's Institute in Paris.

Under the head of *prevailing diseases*, typhoid fever and much of the usual infantile maladies were reported.

It was announced that Dr. W. S. Tremaine would speak on Hernia at the September meeting.

Progress in Medical Science.

RHINOLOGY, LARYNGOLOGY, AND OTOTOLOGY.

BY FRANK HAMILTON POTTER, M. D.

ANESTHESIA IN SMALL SURGICAL OPERATIONS.

DR. AD. BARTH, of Berlin, (*Archives of Otolaryngology*, April-July, 1890,) contributes some observations on Cocainization, Electrical Cataphoresis, and Hypnotism and Suggestion, as employed for the purpose of producing anesthesia in small surgical operations. In regard to cocaine, he says that while it cannot be recommended for continuous local treatment in chronic inflammation of mucous membranes, yet it retains its permanent value for local anesthesia, for reducing a swelling, for diagnostic and therapeutic purposes, especially in the nose, and eventually as a palliative measure in acute irritation and inflammation. Electrical cataphoresis is the method of employing cocaine in operations upon the ear. The ordinary method of its application proving unsatisfactory, Wagner suggested it being used in connection with the electrical current. Dr. Barth proceeds as follows: An eight to ten per cent. solution of cocaine connected with the positive pole was permitted for fifteen or twenty minutes to act upon the part to be anesthetized. The negative pole was placed upon the nape of the neck. The current was produced by four to ten Glauert's (Spamer's) elements, according to how recently the apparatus was filled or to the sensibility of the patient. For application to the ear the author simply rolled some cotton around the wire point, which is screwed for other purposes into the handle of the positive electrode, using it like a cotton carrier, and introducing it into the external auditory meatus. The external portion of the meatus must be protected by cotton against the direct contact of the wire with the skin. After considerable experience with this method, he concludes that in many cases sensibility was entirely abolished, and in most it was extremely

diminished. Any tendency to vertigo can be avoided by the simultaneous electrization of both sides.

The rest of the article is devoted to the consideration of the value of hypnosis, both as an anesthetic for operations upon the upper air-passages, and as a therapeutic measure in some of the diseases seen there. A few cases are given in illustration. While hypnotism is considered a valuable aid, it ought to be used by those only who are experts in regard to it. Dr. Barth has never seen injurious effects from its employment, and thinks that when they occur the fault is not to be found in hypnotism, but in the hypnotizer. One practical point may be given in his own words :

Since we never know beforehand how deep the hypnosis will become, and, principally, whether we will succeed in producing thereby anesthesia, I have *always simultaneously used local anesthesia in operations, leaving to the hypnosis only the removal of the undesirable action of the psyche.*

Is it not pertinent to inquire how Dr. Barth can estimate the anesthetic power of hypnosis if he always uses simultaneously with it local anesthesia ? .

In conclusion, he quotes with approval the words of Forel :

The application of the entirely safe suggestion (I do not mention the dangers incident to its unskilful, criminal or improper use) will no doubt gradually occupy the position it deserves in therapeutics ; its indications should be rendered more precise, and freed from exaggerations, and the correct manipulation should be learned.

And he believes that hypnosis will secure for itself a permanent place in the diagnostic and therapeutic management of hysterical deafness, subjective noises, hyperesthesia, and like conditions, as well as in small operations.

RUPTURES OF THE MEMBRANA TYMPANI.

Leopold Treitel, of Breslau (*Ibid*), concludes a paper on Ruptures of the Membrana Tympani, with especial reference to their Forensic Importance, with the following remarks concerning the treatment : The chief rule is to do no harm. A trivial injury of the membranum tympani, unskilfully treated, may become the starting point of a chronic middle-ear suppuration, with all its disagreeable consequences. The best treatment is simply to close the meatus with a wad of absorbent cotton, and to avoid all use of the syringe. There are plenty of physicians who still use the syringe in these cases, but it should not be used unless suppuration

ensued, and even then with great caution. Furthermore, the forcing of air through the tubes by the physician or the patient ought to be most carefully avoided. And, on the whole, if there are no further complications, the patient can attend to his affairs as usual.

UNDECIDED QUESTIONS CONCERNING ATROPHIC RHINITIS.

Lennox Browne, of London, (*Journal of Laryngology and Rhinology*, July, 1890,) in a paper entitled, On the Classification of Intra-nasal and Naso-Pharyngeal Diseases, reviews some of the questions as yet undecided relating to diseases as seen in these localities. In regard to atrophic rhinitis, we must consider whether it is ever a sequel to hypertrophic rhinitis, or, as asserted by Bosworth, an entirely separate disease. Are there not varieties of atrophic rhinitis? What relation do the constitutional dyscrasæ, such as anemia, struma, syphilis, etc., bear to the disease? What influence has alcohol in its production? In what degree is it influenced by disorder of the portal circulation, and what is the importance as an etiological factor of sexual irritation, delayed menstruation, menorrhagia, and other uterine floodings? Is there any constancy or unity of bacterial association? Is it ever the direct sequence of an exanthem, or of unsanitary surroundings? Further statistics and facts are also required on the peculiar physiognomy of the subjects of atrophic rhinitis. Is there always an upturned and abnormally patent nostril? Lastly, is it ever curable? Answers must be sought to these questions before we can advance our knowledge of atrophic rhinitis.

ON SOME COMPLICATIONS FOLLOWING THE REMOVAL OF ADENOID GROWTHS FROM THE NASO-PHARYNX.

Dr. A. Cartaz (*Revue de Laryngologie, D'Otologie et de Rhinologie*, for July 15, 1890,) states while the hemorrhage following the removal of adenoid growths from the pharyngeal vault is generally easily controlled, yet, sometimes, it is quite severe. He quotes four cases reported by D. Bryson Delavan, of New York, in which the bleeding was so severe as to cause anxiety. He also reports two cases as occurring in his own practice. Besides these he has collected a few other cases — one by Segond, two by Ruault, one by Gellé, and one by W. Scott Renner; the latter was reported in the *BUFFALO MEDICAL AND SURGICAL JOURNAL* for April, 1890. The author holds that these hemorrhages do not result from the wounding of an important vessel — they are rather

"hemorrhagies en nappe," and are more liable to occur when the growths are fibrous in character. Severe bleeding is also more likely to occur when the parts are in a state of congestion from inflammatory attacks. The treatment consists of astringent irrigations as hot as can be tolerated, and the plugging of the naso-pharynx. The plug must be large enough to pass into the posterior nares.

There has also been observed after these operations septic fever, facial erysipelas, tonsillitis and inflammations of the middle ear. These are all rare, and when they occur are usually of a mild type. They disappear in a few days under appropriate treatment. Cartaz agrees with Schaeffer in condemning inflation of the Eustachian tubes immediately after operation. It is apt to project blood and the débris of the vegetations into the tubes and thus excite serious inflammations. On the other hand, irrigations of the pharyngeal vault has never in his hands led to any trouble. He counsels the employment of antiseptics, especially as to the instruments, in order to prevent the development of any septic trouble. He believes, also, that the thorough washing out of the nose and naso-pharynx for a few days previous to the operation with a five per cent. solution of boric acid, to be of benefit.

SALOL IN ACUTE TONSILLITIS AND PHARYNGITIS.

Jonathan Wright, of New York, (*American Journal of the Medical Sciences*, August, 1890,) after a careful study of the action of salol in acute tonsillitis and pharyngitis, adopts the summary of Gouguenheim as a proper guide for its administration :

1. Salol acts beneficially in acute anginas of whatever cause.
2. It quiets the pain and dysphagia with the greatest rapidity.
3. In quieting the pain it may shorten the duration of the quinsy.
4. It lowers the temperature.
5. In nearly all cases it diminishes the duration of the angina.
6. In order to attain those results, the dose should not be less than four grammes (sixty grains) daily.

DISEASES OF CHILDREN.

BY DELANCEY ROCHESTER, M. D.

DESSAN, S. HENRY, M. D., (*Archives of Pediatrics*, vol. vii., pp. 600, *et seq.*) Antipyrin in Diseases of Children, calls attention to the fact "that no class of remedies of recent introduction has proved of so

much value and interest to the medical practitioner as that of which antipyrin is the type," and that "especially is this statement applicable to the diseases of infancy and childhood."

It is more as a nervous sedative than as an antipyretic, however, that it is useful among children.

In the pneumonias of children he gives it for its double effect when the temperature reaches 104° F. or over. He administers it in two and a half to five grain doses, repeated every hour for four doses, once in the twenty-four hours, preferably towards evening, "so as to secure sleep, which commonly follows as a result of its sedative action."

His "most marked success with antipyrin has been in the treatment of chorea." He has treated, in all, seven cases, "two being still under treatment, with improvement. Of these seven cases, one was cured in one week, two in three weeks, one" (in which arsenic bromide of potassium, iron and digitalis had failed) "in four weeks, and one, the severest of all, in six weeks." "When we reflect that according to the report of the collective investigating committee of the British Medical Association on chorea . . . the results of drug treatment, the favorite remedies being arsenic and iron, showed an average duration for the disease of ten weeks, the same duration being shown with non-drug treatment (that is hygienic and dietetic measures only), I think we are warranted in granting a foremost place to antipyrin in the management of chorea. The average duration for the disease in my own cases was only four weeks."

He also mentions favorably its already well-known action as a remedy in acute articular rheumatism, and in pertussis. He has found a new use for antipyrin in the treatment of "cases of *urticaria* that have resisted the time-honored treatment of rhubarb and soda mixture, either alone or combined with bromide of potassium or many other remedies." He says: "Let it be distinctly understood that I do not refer to ordinary acute attacks of urticaria, that will disappear under restricted diet alone, but the persistent cases that ~~will continue~~ continue in an intermittent manner for months in spite of arsenic and all other known remedies. In such cases I have found antipyrin to act with speedy relief."

He also states that he has had several cases of headache and neuralgia in children that have been relieved promptly as in adults.

THE USE OF COMMERCIAL MILK SUGAR IN INFANT FEEDING.

BRUSH, E. F., M. D., (*Archives of Pediatrics*, vol. vii., pp. 605, *et seq.*) read an article with this title, before the American Medical Association at Nashville, in which he shows that commercial sugar of milk, that is now so much used in infant feeding, is an unreliable article as to purity; and, even when pure, has different *physiological* properties from those of the sugar as it exists in human milk. He says :

One of the faults of physiological chemists is that they make no distinction between a substance existing in a natural condition and the substance eliminated and isolated by chemical means. Thus, the sugar of milk of commerce and the sugar of milk as it exists in that fluid are regarded by the chemist as one and the same thing. Hence, the physician has been led into the error of thinking that as the sugar of milk is that designed by nature as the best saccharine nutrient, therefore the isolated sugar must fulfil the same function. This is not the truth. Sugar of milk in that fluid is all assimilated, and the milk-sugar of commerce, when added to baby food, is eliminated both by the kidneys and by the bowels. This I have demonstrated by numerous experiments. I have never found sugar present in the urine or feces of babies fed at the breast, but in three cases of infants fed with mixtures containing milk-sugar to the amount of three ounces or more, in twenty-four hours I have always found sugar in the urine and feces, demonstrated by Fehling's test. . . . Therefore, instead of being of value as a nutrient, it must be harmful, to what extent I am not at present prepared to say. A substance that is not broken up in the system, but eliminated without change, if it be not an absolute poison, will produce little, if any, appreciable immediate effect.

These remarks of Dr. Brush's are interesting, as they show that the problem of infant feeding has not, even theoretically, as it certainly has not practically, been solved by Roche's modification of Meigs's mixture; but it is a pity that Dr. Brush has not completed his observations. It is possible that there may be a difference between the sugar of cow's milk and the sugar of human milk, as there certainly is a difference in the case of the two milks that is something more than a greater or less dilution by water.

In the present status of our knowledge, we must be thankful that there are so many different food preparations possible for the nourishment of the infant, for of no class of beings is it more true that "what is one's meat is another's poison."

THERAPEUTIC NOTES.

HYPODERMIC INJECTIONS OF ERGOT IN FACIAL NEURALGIA. — For the relief of facial neuralgia hypodermic injections of ergot are incomparably superior to aconite or gelsemium. Any one who has used it will never resort to either of the above named remedies. I have used it the last six years, and have never had it fail in but one case. In that case there was evidently organic disease. Ordinarily one injection relieves the pain permanently; sometimes two; and in one very severe and obstinate case which had gone through the hands of several physicians without relief, it required three. After the third injection he never had a twinge of pain. I put it in the temple, as nearly over the seat of pain as convenient. I used the plain extract, and have it made on purpose for hypodermic use. One minim represents two grains of ergot. Of this I use from eight to twelve minims blood-warm, at one injection, and without diluting. In order to make this a success, two things are essential: one is, to have a fresh and pure article of ergot to make the extract from; and the other is, to have the extract reasonably fresh. If kept long, it is not only worthless, but irritating. When properly prepared and fresh, it produces more or less pain for ten or fifteen minutes, and when the pain from the injection subsides the neuralgia is usually gone, and does not return.

I have used this treatment for sciatica and other forms of neuralgia, but not with very satisfactory results. — DR. STEWART in the *Peoria Med. Monthly*.

BAD BREATH. — Dr. Frank H. Gardner, in the *Dental Review*, speaks of the causes of bad breath. He concludes: First, decaying particles in the mouth as far back as the pharynx vault taint the breath, if exhaled, very little, if at all. Second, mouth-breathers have a bad breath when the tonsils are enlarged, or when cheesy masses exist in the tonsillary mucous folds. Third, certain gastric derangements taint the breath only when gases are eructated through the mouth. Fourth, the principal cause of bad breath is decomposition in the intestinal canal, the retention of fecal matter in the transverse and descending colon, and the absorption of gases into the circulation, finally exhaled by the lungs. Fifth, catarrh, nasal, pharyngeal or bronchial, causes bad breath. Sixth, medicines or aliments which undergo chemical changes below the esophagus may, by rapid absorption through the stomach walls, or immediately below, give to the breath the characteristic odor. Bad breath is often a source of serious annoyance to patients, and the fact that

it has more than a local cause is too often ignored by the physician, who therefore fails to cure it.

EFFECTS OF CLOSE SHAVING.—A writer in the *Medical Classics* looked through a microscope at a closely shaved face, and he reports that the skin resembled a piece of raw beef. "To make the skin perfectly smooth requires," he says, "not only the removal of hair, but also a portion of the cuticle, and a close shave means the removal of a layer of skin all around. The blood-vessels thus exposed are not visible to the eye, but under the microscope each little quivering mouth holding a minute blood-drop protests against such treatment. The nerve tips are also uncovered and the pores are left unprotected, which makes the skin tender and unhealthy. This sudden exposure of the inner layer of the skin renders a person liable to have colds, hoarseness, and sore throat.

POKE BERRIES A SATISFACTORY ANTI-FAT.—Several years ago, I called attention to the efficacy of pills made from the extract of poke berries as a reliable remedy in obesity. My attention was attracted to it from the fact that birds that feed on poke berries in the Fall are deficient in adipose tissues. It has been my custom for several years to gather, in the Fall after frost, a quantity of the berries, express their juice, and evaporate it to the consistency of an extract, of which I make pills of three or four grains. The dose is two pills before each meal, sometimes increased to three or four. They diminish the appetite to some extent. In some cases the reduction of weight is remarkable, as much as fifteen to twenty pounds per month.—M. M. GRIFFITH, M. D., in *American Hom.*

OF THE treatment of summer diarrhea, Waugh, of Philadelphia, says:

This is the third Summer in which I have been using the sulpho-carbolate of zinc as a remedy in summer complaint. As yet I have no reason to alter the opinion I formed two years ago: that this is the safest and most effectual remedy at our command for producing intestinal asepsis. In simple diarrhea, the alkaline syrup of rhubarb, with the addition of a little tincture of hydrastis (a drachm to the ounce of syrup), answers every purpose; but if this does not promptly cure, or if the stools continue to be offensive, or if the case looks at all serious, I order at once the sulpho-carbolate, in doses of one-half to two grains every two hours, in powder, with a little bismuth.

THE REMOVAL OF MOLES.—Moles on the face are now being successfully treated by the use of sodium ethylate. The mole is painted with the sodium ethylate, a fine glass rod being used. When the mole has a varnished look, the ethylate is gently rubbed in with the glass rod to make it penetrate more deeply. The mole turns nearly black, and a hard crust forms over it, which is nearly three weeks in becoming detached. When it comes off, the mole is much lighter than before, and this treatment can be continued until the mark is scarcely noticeable.

TREATMENT OF INCONTINENCE OF URINE IN CHILDREN.—It is very important (*Annales d' Orthopedie*) to recognize the cause of the incontinence. If local causes have to be excluded, the probable cause is a simple nervous debility; puberty will probably end this trouble. Local causes should be treated, if diagnosed. If the urinary passages are too irritable, belladonna will give good results; if the sphincter lacks tonicity, strychnine will doubtless prove useful. It is impossible to predict what medicament should be used.—*Times and Register*.

ICE IN THE NIGHT SWEATS OF PHTHISIS.—Rosenbach (*Pr. Med. Wochens.*) recommends for arresting the night sweats, which so enfeeble the phthisical, applications over the abdomen of a bladder half full of ice, and to let it remain several hours. The patients tolerate it very well, even when they present an evening elevation of temperature. This means succeeds where atropine has failed, as well as powdered salicylate of soda sprinkled over the entire body.—*N. Y. Med. Times*.

A TEST FOR THE PURITY OF DRINKING WATER is given as follows by Prof. Angell of the Michigan University: Dissolve about half a teaspoonful of the purest white sugar in a pint bottle, completely full of water to be tested, tightly stopped; expose it to daylight and a temperature up to seventy degrees Fahr. After a day or two examine, holding the bottle against something black, for floating specks, which will betray the presence of organic matter in considerable proportion. *Practice*.

PANCOAST holds that as men are made drunk sooner when standing or sitting while taking alcohol, than when in a recumbent posture, in like manner it takes less ether to produce anaesthesia if the patient sits up.

FOR ECZEMA OF DENTITION, treatment is to be directed to three indications (*Gazette Hebdom. in Annals of Gynecology and Pediatrics*, July, 1890.)

1. To calm pruritus of the gums, frequent rubbing with the finger dipped in a solution of the following :

R—Cocaine hydrochlorat..... gr. j
 Potass. bromid..... gr. x.
 Glycerin.....
 Aqua destillat..... aa f3ss. M.

2. For insomnia a dessertspoonful hourly of—

R—Sodii bromidi..... gr. xij
 Syrup aurant. flor..... f3iij M.

3. For the local eczema the following :

R—Zinci oxid..... gr. xx.
 Vaselini 3j. M.

POORLY nourished persons who suffer from constipation should have a generous diet. Those who can do so without discomfort should drink cream. The next best dietetic remedy is fresh butter, which they should use freely on their foods. Cocoa to a certain degree is nourishing, and, therefore, as a beverage is preferable to coffee or tea, provided, of course, it is well borne.—*Boston Journal of Health*.

ONE of the very best applications for the bites of mosquitoes and fleas, also for other eruptions attended with intense itchings, is menthol in alcohol, one part to ten. This is very cooling and immediately effectual. It is also an excellent lotion for application to the forehead and temples in headache, often at once subduing the same.—*Boston Journal of Health*.

EARACHE.—Take five drachms of camphorated chloral, thirty parts of glycerine, and ten parts of the oil of sweet almonds. A piece of cotton is saturated and introduced well into the ear; and it is also rubbed behind the ear. The pain is relieved as if by magic, and, if there is inflammation, it often subsides quickly.—*Times and Register*.

HOW TO DETECT THE MORPHINE HABIT.—An efficient means of detecting the morphine habit is by adding a few drops of perchloride of iron to the patient's urine. A characteristic blue tinge results if he is a morphine user.—*N. Y. Med. Times*.

Correspondence.

LETTER FROM PARIS.

Second Letter from Dr. Hayd—He Still Praises Apostoli's Work—Galvano-Puncture Especially Endorsed—Terrier and Doleris are also Doing Good Work—Details of Cases Seen in the Clinics.

IN MY last letter, in a general way, I spoke of the work at the Rue du Jour; and now, after having spent six weeks in regular attendance, and with the recent cases fresh in my mind, I can speak more definitely of Apostoli's work. It continues to please me, and the results of galvano-puncture, when properly performed, are very satisfactory. I have seen a good many patients in whom a galvano-puncture was made, and I have never seen any bad effects, nor observed any complication follow it. I never have seen a great unsightly slough, or a deep circuitous suppurating track, as I had been told I should see by the opponents of this practice. When a patient is suffering from painful cellulitis, either in the shape of adhesions around the womb, or ligaments, or a painful and often very tender mass in the posterior cul-de-sac; and when ordinary galvano-cauterization has failed to accomplish what was expected, there a puncture may often be made with much satisfaction; of course, a thorough knowledge of the pathological condition is necessary, and then with reasonable care this little operation is a very simple procedure. Apostoli's needle is a sharp-pointed instrument—preferably a gold tip, but steel will do—fitted into a handle and surrounded by a movable sheath. As much of the point is pushed out of the sheath and exposed as you desire to penetrate into the tissues: usually for parametritic exudations three millimeters is all that is necessary, and five mm. for a fibroid. Thus you can see the punctures are very superficial, and possible danger reduced to a minimum. The sheath is directed along the finger to the painful spot, and, if possible, placed where there is no blood-vessel, and held in position until the needle is pushed into the mass. About twenty-five to thirty ma. positive galvanism are given for a period of five minutes. There is but little pain during the séance, and the patients are permitted to walk home in a couple of hours. In cases of very acute and exquisitely sensitive spots chloroform is necessary, because many of these patients are not simply nervous,

but would really suffer very greatly if not anesthetized. Moreover, as a precaution, they are put to bed and kept there until morning, when they are permitted to go home. The vagina is packed with iodoform gauze, and changed in a few days. But rarely more than two or three punctures are necessary, and the interval between the punctures is from fifteen days to three weeks. When it is evident that a fibroid is not doing as well as is desired under galvano-cauterization, which I assure you is extremely rare, then Apostoli punctures; fifty and sixty ma. are given and no chloroform is necessary, nor do the patients suffer much pain,—at all events not unsupportable.

I can't help but look upon Apostoli and his work with admiration, particularly in these fields, where we can do so little with the other agencies at our disposition. One case was extremely interesting. A woman of good position came to Apostoli eight years ago with a very large fibroid. She was suffering much pain, and at the same time losing a great amount of blood,—in fact, was a dangerously sick woman. Drs. Pean, Championnerre, and other surgeons declined to operate upon her. The abdominal parietes were very thin from distention, and the adhesions were so great that it was impossible to move the tumor laterally. After a few months' treatment her condition improved, the menses came with regularity, and not profuse, the pains were relieved, and the general condition of the woman improved. Gradually the adhesions were absorbed, and to-day, after a period of eight years, we find the tumor still very large, but freely movable, in fact a good case for an operation; and the abdominal parietes, instead of being thin and tense, are soft, placid, and filled with a great layer of fat. Dr. Apostoli tells me that he has frequently made this operation, and on this account invariably measures the thickness of the external tissues before treatment is begun. Retrocession of the tumor often takes place, while at the same time much fat is developed in the subcutaneous tissues over it. This woman has had no treatment for five years.

A week ago I saw a very interesting case,—in fact, one such as we often see as a complication of an insidious gonorrhea. It enabled me to find out exactly Apostoli's position in reference to the application of electricity in ovariopyo-salpingitis. The patient was a woman twenty-four years of age, and with the history of a sudden and severe illness. Upon examination the abdomen was found to be very tense, painful and tender over the ovaries. Per

vaginam, a large mass of cellulitis was felt in the posterior cul-de-sac, extending into the broad ligaments and enveloping the whole womb. The womb was immovable, and the parts very sensitive to the touch. In the right broad ligament there could be felt a distinct globular tumor about the size of a small egg, very firm and not fluctuating. The question at once came up, Was this the tube filled with pus and surrounded by a strong, thick wall of inflammatory exudation, or was it simply a large mass of inflammation which had not advanced so far as to develop a definite cyst? Here Dr. Apostoli said electricity would direct and confirm him in his diagnosis. He would commence to treat her with twenty ma. positive galvanism, intrauterine, which if borne well would be increased. After four or five treatments, if no pus was present, he would expect the woman to improve; but if pus existed, she would not tolerate the electricity, and would not be benefited by it. Then there was but one thing to do, as the suspicious diagnosis would have been confirmed,—an abdominal section or drainage per vaginam would be advised. You will observe, therefore, if Apostoli is satisfied that a definite cyst or abscess exists in the tube, an operation is at once advised, and that he only uses electricity in cases of catarrhal salpingitis or pyosalpingitis, when no pus collection has taken place. I was particularly pleased to see him lay down these conclusions, and at once saw his anxiety to place this poor woman under the best treatment possible for her condition. Would that the few operating surgeons who still disregard the beneficial influences of electricity, were as fair with their patients; then I am sure fewer women would be spayed, and the opprobrium associated with the indiscriminate castration of females would be lessened! Another general rule Apostoli lays down so as to make one suspicious of the possible presence of pus is this: When a woman, not hysterical or preternaturally sensitive to pain, complains much when twenty or thirty ma. of positive galvanism is given her, be on the lookout for something serious, perhaps pus.

In my last letter I also spoke of the faradic current—current of tension—and I have seen surprising benefit from it, in that class of nervous women who complain of painful iliac regions, tender upon pressure, with dysmenorrhea, and often dyspareunia, and vaginismus. Many of these patients are very sensitive to deep pressure in the epigastric region, and scream when pressure is made in the pit of the stomach.

My admiration for Terrier has increased, and I believe he does the best abdominal work in Paris. Doléris, another man celebrated for his operations in the vagina and upon the perineum, I have also visited quite frequently. Besides a number of Emmet operations which I have seen him make, I was particularly pleased with his modified Tait's operation for lacerated perineum, colpo-perineoplasty. The case was a marked rectocele, due to a large, soft relaxed vagina, with little or no supporting tissue in the perineum itself. A circular incision is made at the junction of the vaginal mucous membrane and skin, and with the index finger one separates the vaginal mucous membrane posteriorly and laterally for a good distance, and as high up, if necessary, as the cervix uteri. Then the perineal edges are brought together with three or four deep sutures made of florence gut. This is a very nice ligature and very strong, and is made from the silkworm's gut. After the perineal edges are approximated, the vaginal orifice is much reduced in size, and the little piece of loose superfluous mucous membrane which protrudes through the orifice is snipped off and the free edge picked up with a suture. This operation is employed for all lacerations of the perineum, and is modified somewhat for prolapsed bladder. There is very little hemorrhage, the operation is very quickly done, and there is left in the vagina for its posterior wall the natural vaginal tissue, instead of the scar tissue, which results from an ordinary perineorrhaphy.

Silk ligatures are used altogether by French surgeons in the abdomen, and often are very, very large. The pedicle of an ovarian cyst or base of a tube case are tied with a ligature as thick as our ordinary grocer's twine. The superficial skin ligatures are of this florence gut. There is no feeling of hesitancy in applying any number of silk sutures in a wound of any description.

To avoid shock during and after an operation, the patient's extremities are wrapped in flannel to the thighs to keep them warm. Chloroform is invariably used in all the hospitals—in fact, I have never seen ether given.

H. E. HAYD.

PARIS, JULY 4, 1890.

AN ABSENT-MINDED doctor recently took unto himself a wife. During the marriage ceremony, when she held out her hand for the ring, he felt her pulse and requested to see her tongue.

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Editorial.

HAY FEVER.

THE season of this perennial malady is upon us, and we are glad to offer our readers some late thoughts on the subject in this issue of the JOURNAL, which will be found in the proceedings of the Buffalo Medical and Surgical Association.

Dr. William H. Daly, of Pittsburgh, who has long been recognized as competent authority on laryngological questions, has also done much to increase our knowledge in regard to hay asthma. Dr. Daly was chosen to deliver the annual address on Laryngology before the Medical Society of the State of Pennsylvania, at its meeting held in Pittsburgh in June of the present year, and we select that portion of his address published in the *Medical Mirror*, July, 1890, pertaining to this disease, which will prove of interest in connection with the discussion above alluded to as published elsewhere in this number.

In discoursing upon hay asthma, says Dr. Daly :

Concerning what laryngology and rhinology have done in the successful treatment of hay asthma, I probably feel myself more competent to speak than upon some other questions. Since 1881, when I first made known to the profession my observations upon hay asthma, in a paper which I read before the American Laryngological Association, I have treated over one hundred cases of this very troublesome disease ; but it is of the first two hundred cases that I shall now speak. I have taken pains in the treatment of all these cases of hay asthma, to confine myself as far as possible, to the treatment of putting the intra-nasal tissues in a normal and healthy condition, whether by means of surgical operative procedures, or by the milder methods of local medicinal

applications. This has resulted in a cure of sixty-eight per cent. of these cases, and with a large portion of the remaining thirty-two per cent. more or less improved, although proper subjects for more thorough treatment, with fair prospects of further benefit or cure. In asthma, the results have been also satisfactory, at least far more so than by any method which does not include the restoration of the intra-nasal and naso-pharyngeal structures to a normal and healthy condition.

In one hundred cases of asthma the cures have been thirty-four per cent., with a large proportion of the remaining cases benefited. There is something strange, indeed, in the way in which the subjects of hay asthma deny themselves the rational investigation of their disease, hugging the old and threadbare theories of hay asthma and its tentative treatment to their bosoms, and going on from Summer to Summer, looking forward to the recurrence of their attack with a sort of valetudinarian glee, that upon such a date they will enter upon a new sort of life, so to speak, when they will have the doleful pleasure of sneezing and sniffing and growling. And if the patient be a medical man,—the worst sort of a patient, by the way,—he not only wants to be considered a very sick patient, but wants to “boss the job” while his professional brother endeavors to cure him. When a medical man finds himself in the midst of his recurrent hay asthma, with the upper air passages dammed so as to make his breathing a difficult and disagreeable matter, unless he be a very humble and Christian man, he in turn “damns” everything that comes within his reach, whether it be domestic or professional, and will not hesitate to “damn” his professional brother too, whom he calls upon for relief, if he is not handled as tenderly as if he were a sick kitten. I speak from experience with my professional brothers suffering with hay asthma. But let the doctor once get over his acute attack and he would not let you touch the interior of his nose for the world; he is too afraid of getting hurt.

Now as to the clergyman with hay asthma: he knows when he has a sure thing that will get him a trip, annually, to the Adirondacks, where he can shoot deer, with young fawns at their side, out of season; or make a trip across the ocean, on funds from a fat subscription, started by some of the adoring old maids of the parish. This clergyman don't want his nose looked into for any cause of hay asthma, “not he”; that nose is his best friend; it is like the “blind eyes” to the beggar, or the “wooden leg” to the candidate for alms; it is his capital stock that annually turns loose as dividends the golden flood gates of sympathy—gets him “a rest,” and also his congregation “a rest.”

Now, gentleman, I hope I may not be accused of taking too great liberties with either the status of the medical or clerical professions, upon the question of hay asthma, when I say I believe they deserve all the animadversion I have indulged in, and more too. And as to the respectable and exclusive society of hay asthma sufferers, who annually

congregate in various locations of New England to shed tears and sneeze over one another's shoulders, and in one another's faces, in a sort of "vaso-motorio rhinological" love feast, where the congregations, employers, and others not directly interested, help pay for the entertainment; I have had members of this society shake their heads at me and say, "You doctors cannot cure my hay asthma; nobody can cure it; it cannot be cured." To which I have sometimes replied: "Nor do you want to try to have it cured, by the only rational method known to modern medicine." And I have often been correct in my opinion, for these men would not have the inside of their noses cut, or burned, or sawed for anything; it might hurt. Some of them — nay, the most of them — have never even had the interior of their noses examined by a medical man competent to discover abnormalities, and cure them when he finds them.

Now I may ask in the same spirit that the christian believer asks the propagator of the doctrine of infidelity. What better have you to offer me than my faith and practice which I now hold? What results can compare with those I have given you in the treatment of hay asthma? and what are the carpings of the unbeliever, when he is unable to say, "I have no surer scheme of salvation to offer you if you relinquish the one you are now adapting to the benefit and relief of suffering humanity."

THE ABUSE OF HYPNOTISM.

THE theory of hypnotism has been discussed by men of all countries. Most wonderful reports of the power of suggestion are published every now and then from the European clinics, notably from Kraft-Ebing, Forel, Bernheim, and Charcot. A careful reading of these reports cannot fail to impress one with the thought that, in many instances, the operator, in his enthusiasm, forgets the true spirit of the duties of the medical man — to do, first, no harm to the patient; and, in the second place, to do him good if he can.

Many of the experiments are conducted, primarily, with the idea of investigating the field of hypnotism, to note how many suggestions can be given to a patient, and see how long they will operate. They seek not only to bring about useful results, but startling effects.

Thus, Charcot reports a patient hypnotised, to whom he suggested that a blank card was his photograph, and allowed the suggestion to remain in the post hypnotic state; thus bringing about the interesting condition of a person unable to distinguish a blank card, making him the laughing stock of the other inmates of the ward

and ultimately leading the patient to distrust his own senses. The experiments of Kraft-Ebing, who hypnotised a nun and suggested that blisters and burns would appear on her body, did not do this for the patient's good, but to her positive harm. The experiment was interesting, but not justifiable. Conscious of their power, and glorying in it, men abuse it, as may be seen from this extract from Prof. Donato's article in the August *Cosmopolitan* :

I attended Madame Michéle, who had a stroke of paralysis. Her companion expressed doubts as to the efficacy of my curative power. Finally, somewhat irritated, I said: "Mademoiselle Léonie, to prove my power, I will paralyse your legs by a gesture. You can walk no more." In effect, Léonie, seized with fright, begged of me to give her back the use of her limbs.

This was as much assault and battery as if he had struck her, and was a vastly greater shock to her system. Just such frights can be the exciting cause of chorea and hysteria.

Donato says, further, that by surprising his patients he obtains paralysis and aphony. This is not for the patient's good.

Hypnotism has its therapeutic place, and it should not be used outside of it. If a patient has a disease or a symptom that can best be removed by hypnotism, by all means let it be used, but all temptation to make a show should be resisted, else this procedure will assuredly fall into disrepute, which it ought not to do.

A MILD PROTEST.

UNDER the above title, the *Nashville Journal of Medicine and Surgery*, July, 1890, calls us to account in the following language :

Our much-esteemed contemporary the *Buffalo Medical and Surgical Journal*, under the caption of "Twixt Tweedle-dum and Tweedle-dee," has been pleased to criticise an editorial that appeared in the May issue of the JOURNAL, starting out in his remarks with the mistake that this journal is the organ of the President-elect of the American Medical Association. We would like to disabuse the mind of the distinguished editor of the fact that the JOURNAL is anybody's organ, for we lay claim to a certain amount of independence of any person or any body. This misconstruction of sentiments expressed in the editorial referred to is in reference to our comments upon the matter of consulting with homeopathic or other irregular practitioners. The following is our language quoted by him : "There can be no doubt that certain circumstances *might be looked upon* as mitigating the stringency of this

section of the code, as for example the transference of a surgical case by an irregular to a surgeon, and it would seem that at times such a combination of circumstances have been taken advantage of, surgeons meeting and continuing in consultation with irregulars entrusted to the former by the latter." We have italicized certain words in the extract, that show the conditional nature of the meaning intended to be conveyed. We cannot see at all that the above extract meant in any way favoring consulting or consorting with irregulars. Certainly we did not mean to convey that impression, for individually no one is more positively averse to the recognition of homeopathy in any form than ourselves. As for the *JOURNAL* being the mouth-piece of the President-elect of the American Medical Association, we wish to enter a mild disclaimer.

We hope our confrère will read the position of the editor of this journal aright.

If our good friend will re-examine the article of which he complains, he will observe that we reproduced it from the *Chicago Medical Standard*, giving the latter credit therefor. We regret that it should seem to do injustice to our highly respected Nashville contemporary. We do not believe "the *Journal* is anybody's organ," though it was, perhaps, natural for the *Standard* to infer from the relationship of the editor of the *Journal* to the president of the American Medical Association, that the former was entitled to speak *ex cathedra*, to a certain extent at all events, in ethical and other constructive expositions of the law of the association.

We approve most heartily of the position taken by the *Journal* upon the point in question, and desired to be merely so understood when we gave the heading "Twixt Tweedledum and Tweedledee" to the *Standard's* utterance on the subject, adding at the end "Echo answers. Wherein?"

THE importance of proper attention to the selection of underwear is very great in this capricious and continually changing climate. There is no greater fancy than the popular belief that silk is the proper texture. Science and experience both agree that woolen properly woven furnishes the correct and healthful dressing for the surface of the body, not only protecting it from the scorching heat of the sun, but enabling the skin to act properly in relation to the demands made with which to constantly struggle in order to live. The Haverfield Knitting Company, of Troy, N. Y., and its numerous affiliates, endeavor to free from personal experience, and as often from scientific studies made. We observe that Adam, Moldenke & Anderson, of Buffalo, are agents

for the sale of these garments. Every physician should at least examine them.

THAT bright new Southern journal, *The Dixie Doctor*, says :

Many of our exchanges think it no harm to cull from our columns without credit. It is remarkable how tough and elastic their consciences are, and how innocently they steal the result of much laborious work and time spent in condensing newsy matter. One clip of the shears and they take lazily what they cannot or will not do for themselves. We would name some of these transgressors, but do not wish to give them what they seek—free advertisement.

True ; but will the good *Dixie Doctor* tell us where he culled the note on the Pronunciation of Gynecology in his July number ?

DR. WILLIAM LOMAX, of Marion, Ind., has recently endowed the Indiana Medical College with the generous sum of \$100,000, encumbering the gift only to the extent of an annuity of \$1,200 to himself and wife as long as either shall live. This example is worthy of imitation in other cities where medical colleges are in urgent need of substantial encouragement in their work of educating young men for the profession of medicine.

Society Meetings.

THE American Association of Obstetricians and Gynecologists will hold its next annual meeting in the City of Philadelphia, on Tuesday, Wednesday and Thursday, September 16, 17, and 18, 1890, in the hall of the College of Physicians, corner Thirteenth and Locust streets. All physicians interested are invited to attend the several sessions.

WM. WARREN POTTER,

Secretary.

E. E. MONTGOMERY,

President.

THE next annual meeting of the Mississippi Valley Medical Association will be held in Louisville, October 8, 9, and 10, 1890. It is expected that this will be a large and interesting meeting. This Association is noted for the good work it accomplishes, and it may be predicted that, under the experienced leadership of Dr. Joseph M. Mathews, its president, the coming annual will be one of the best in its history.

Medical College Note.

CHICAGO POLICLINIC.—The Faculty of this institution have made the following appointments :

Dr. G. Fütterer (late chief-assistant to Professor Rindfleisch, of Würzburg), Drs. F. C. Hotz and E. Fletcher Ingalls, Professors of Internal Medicine, Ophthalmology, and Laryngology, respectively ; also Drs. Chas. F. Stillman, P. S. Hayes and J. M. Patton, Associate Professors of Orthopedic Surgery, Electro-Therapeutics, and Medicine, respectively.

Book Reviews.

DISEASES OF THE RECTUM AND ANUS. THEIR PATHOLOGY. DIAGNOSIS AND TREATMENT. By CHAS. B. KELSEY, A. B., M. D., Professor of Diseases of the Rectum at the New York Post-Graduate Medical School and Hospital ; late Professor of Diseases of the Rectum at the University of Vermont. etc. Third edition ; rewritten and enlarged, with two chromo-lithographs and one hundred and sixty-eight illustrations. New York : William Wood & Co. 1890. 8vo ; pp. x.—483.

The first edition of Dr. Kelsey's book on Diseases of the Rectum and Anus was published in 1882, as one volume of Wood's Library of Standard Medical Authors. This book met, at that time, with a very cordial reception at the hands of the medical profession throughout the country. In 1884, the second edition of this work made its appearance as a separate volume, much enlarged, containing many valuable illustrations, and embodied in its text could be found all that was new in rectal pathology and treatment. Increasing experience in the study and practice of rectal surgery has prompted the author to give us a third edition of his valuable book. It is perhaps, today, the best American work that we have on the pathology and treatment of rectal disorders, and one well worthy the careful and studious attention of specialists and general practitioners of medicine. It is written in language both clear and concise, and ably presents the author's practical knowledge gained by a large clinical experience. Even a hurried perusal of the book will convince one that Prof. Kelsey is a patient worker and careful observer, keeping well to the fore in

all that pertains to his chosen field of labor. As the author states in his preface :

The great advances which have been made during the past few years in the surgery of the rectum, and intestinal surgery generally, have necessitated many changes in this, the third edition of this book. The chapters on the treatment of strictures, both benign and malignant, and on the formation and closure of artificial anus, have therefore been entirely rewritten, and much new matter has been added.

Dr. Kelsey has spared neither time nor expense in the matter of illustrations, many of the cuts being made from photographs of his own cases taken by himself. The book is printed on good paper, in clear type, and is altogether a volume which reflects credit on both author and publishers.

E. C.

RHEUMATISM AND GOUT. By F. LEROY SATTERLEE, M. D., Ph. D., Professor of Chemistry, Materia Medica and Therapeutics in the New York College of Dentistry ; late Professor of Chemistry and Hygiene American Veterinary College ; Attending Physician St. Elizabeth Hospital, New York, etc., etc., etc. Physician's Leisure Library, Series iv. 1890. Pp. 83. George S. Davis, Detroit, Mich. Price, in paper, 25 cents ; in cloth, 50 cents.

This is an agreeably written little book which, as announced in the preface, contains nothing new as regards etiology, pathology, or treatment of the subjects under discussion. It does, however, place before us in a forcible manner what we actually know in regard to gout, rheumatoid arthritis, and the various forms of rheumatism.

The author does not enter into any discussion in regard to the microbial origin of rheumatism, but simply states that the specific microbe has not yet been discovered, and that, for the present, we cannot go back of the presence of an excess of uric acid and fibrin in the blood as a cause of the clinical phenomena of this disease.

The treatment that naturally follows from this pathogenesis is an avoidance of the nitrogenous foods and the use of alkalis.

He objects to the use of the salicylates in acute rheumatism. He says :

The effect of these drugs, though at times brilliant in producing subsidence of pain, is very uncertain and always transient, relapses being the rule ; and the continued administration of these remedies is, moreover, productive of a series of deleterious symptoms, such as gastric and cerebral disturbances, cardiac depression, obliteration of the first sound of the heart, anemia, and other toxic phenomena.

Our experience has been quite the opposite in the use of these remedies. In all cases of acute rheumatism it is our practice to give sodium salicylate in twenty grain doses every three or four hours, according to the severity of the symptoms. If, at the end of forty-eight hours of this treatment, the patient is not markedly improved, the carbonate of potassium is given in an effervescing draught, with lemon juice. We have seldom found that a resort to the potassium carbonate has to be made. Moreover, with proper care in not allowing the patient to get up too soon, the cardiac complications and sequelæ are very much less in cases treated with the salicylates than in those treated otherwise.

The fact that, in addition to its specific effect upon the rheumatism itself, the sodium salicylate possesses marked antipyretic and analgesic properties, makes recourse to other drugs for the production of these beneficial effects unnecessary, and so lessens the chances for gastric disturbance. We have not yet found the stomach that could not retain sodium salicylate if dissolved in simple syrup and *strongly* flavored with wintergreen (methyl salicylate).

The author's chapters on chronic rheumatism command our thorough approval.

Those on rheumatoid arthritis are also good.

To us the use of colchicum in gout has always seemed thoroughly empirical and without scientific basis, and we are glad to quote Dr. Satterlee's protest against the administration of colchicum in any of its forms:

. Its effects are transient: it interferes with the digestion and circulation, induces muscular feebleness, and acts as an insidious general depressant. Patients soon learn to use it themselves, flying to it while persisting in the error of living, which renders it necessary to their relief. The writer has no hesitation in stating a conclusion, evolved from observation, that many of the sudden deaths among the wealthier classes, of men between fifty and sixty, ascribed to that vague causation, heart failure, are due to the improper use of colchicum.

The book, on the whole, is well worth perusal, and contains several valuable hints in regard to treatment. DEL. R.

HEALTH NOTES FOR STUDENTS. By BURT G. WILDER, B. S., M. D., Professor of Physiology, Comparative Anatomy, and Zoölogy in Cornell University. Second edition, revised and enlarged. New York and London: G. P. Putnam's Sons. 1899.

Brief and concise is this little volume, every page of which

teems with nuggets of useful information for those about to enter upon their student career. It was first intended for students entering Cornell University, in lieu of a public lecture on hygiene, but has now many times outgrown the author's original purpose.

The writer takes the student into his confidence, and tells him how he can best regulate his daily habits and appetites to conform with the duties and cares of student life. The early instruction in hygiene, which is so sadly neglected in many households, is here set forth in that clear and pleasing style so characteristic of the author's writings. It would be well were this little book placed in the hands of every school-boy and school-girl old enough to know that a healthful virtue is necessary to a valetudinarian happiness.

W. C. K.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of the Progress of the General Sanitary Sciences throughout the World. Edited by CHARLES E. SAJOU, M. D., and Seventy Associate Editors, assisted by over Two Hundred Corresponding Editors. Collaborators and Correspondents. Illustrated with chromo-lithographs, engravings and maps. Five volumes. Philadelphia: F. A. Davis. 1890.

This valuable reference work has again appeared with promptitude, and with even greater completeness than before. The labor is so enormous and the difficulties so many to be encountered in the preparation of a work of such vastness, the great wonder is that the subscribers are able to obtain its benefits as early in the year as they do.

Some improvements have been added to this year's issue. These consist of the creation of new departments, as well as the modification of others. The newly-created departments are: Syphilis, edited by Professor William J. White, Philadelphia; Surgical Mycoses, edited by Prof. Ernest Laplace, of Philadelphia; and Thoracic Surgery, edited by Professor J. McFadden Gaston, of Atlanta.

The sections of Oral Surgery, Orthopedic Surgery, Bacteriology, and Therapeutics have undergone modifications, while all the improvements of last year have been continued. The publisher still maintains the high order of excellence with which he began his work, while the engravers are entitled to much praise for the generally good quality of the illustrations. This annual is fast becoming a necessity for the medical writer and teacher, as well as for the practitioner, and it will not be long before the wonder

will be expressed on all sides that such a convenience was not put forth years before Dr. Sajous volunteered to do so.

We have heretofore commended the enterprise of the editor in the conception of and carrying forward to perfection this great literary scheme, and we still desire to add such encouragement as good words may afford towards a continuation of the Annual on the lines already cast.

STORIES OF A COUNTRY DOCTOR. By WILLIS P. KING, M. D., Member of the American Medical Association; Member and Ex-President of the Missouri State Medical Association; Assistant-Chief Surgeon of the Missouri Pacific Railway Company, etc., etc. With illustrations by T. A. Fitzgerald. Small octavo. Pp. 397. Kansas City: Hudson-Kimberly Publishing Company. 1890.

This book is written by an eminent physician, who is also an accomplished surgeon, and is full of such experiences as only a country doctor can boast. The anecdotes provoke laughter in spite of their sometimes pathetic turn, for they relate to a life that is incident to the development of our western civilization. In this progressive march towards the occident, physicians have played an important part. They have not only ministered to the sufferings of the people, and smoothed the pillows of the dying, but they have often performed the functions of civil office, and have otherwise contributed to the education and improvement of the communities where their lots have been cast.

Dr. King is a graceful writer, with a fund of information that he has told in a pleasant way, and his book will afford agreeable companionship at many a fireside, where it will be read by the families that are fortunate enough to possess it.

LEÇONS DE GYNÉCOLOGIE OPÉRATOIRE par VULLIET, Professeur à la Faculté de Médecine de Genève, etc., et LUTAUD, Professeur libre de Gynécologie à l'école pratique, etc. Deuxième édition entièrement refondue, avec 200 figures intercalées dans le texte. 8vo, paper; pp. 500. Paris: A. Maloine, 91 Boulevard Saint-Germain.

The first edition of this work was reviewed at some length in this *Journal* for March, 1889, page 491. In less than a year's interval the second edition is now before the medical world, entirely revised and in part rewritten. Especially in operative gynecology have many additions been made,—as the procedures of Terrier and Leopold for the fixation of the uterus, Lawson Tait's perineorrhaphy, etc. The authors do not belong to the modern

school of electro-gynecologists, but believe it impossible for an electric current to "electrolyse" all undesirable tissues, leaving the desirable tissues of the same histological structure unscathed and untarnished, save by the caustic action of the two poles. They do use, however, the interrupted current to bring about contractions of the uterus, thereby rendering sub-mucous fibromas sessile or pedunculated and, hence, easily removable.

Paper and print are all that can be desired, but the wood-cuts require full explanations to make them intelligible. W. C. K.

MAY'S DISEASES OF WOMEN. Being a Concise and Systematic Exposition of the Theory and Practice of Gynecology. For the use of Students and Practitioners. Second edition, revised by LEONARD S. RAU, M. D., Attending Physician to Harlem Hospital, Out-patient Department, New York, etc., with thirty-one illustrations on wood. Small 8vo; pp. 373. Philadelphia: Lea Brothers & Co. 1890.

This volume is a compilation of the teachings of various American, German, and English authors, which the author says he has "condensed, classified, and arranged, to make the book a short and systematic treatise on the theories and practice of the diseases peculiar to women, which shall represent the accepted views in this modern science." It is also further declared to be its purpose to aid the student who has perused larger works in his review of the subject.

If this kind of literature is desirable, then this book ought to meet the demand, for viewed from this standpoint the work must be pronounced well done. We have discovered nothing new in its pages to direct attention to, hence shall be content in simply stating the features and object of the book, and let each judge for himself as to the desirability of possessing it. It is well printed on good paper with plain type, and is substantially bound.

ELECTRICITY IN THE DISEASES OF WOMEN. By G. BETTON MASSEY, M. D., Physician to the Gynecological Department of Howard University, Late Electro-therapist to the Philadelphia Orthopedic Hospital, etc. Second edition; revised and enlarged. Philadelphia and London: F. A. Davis, Publisher. 1890.

The first edition of this little work appeared in 1889, and in less than a year the author is called upon to prepare a second. This shows how a love of the marvelous and unknown leads not alone the masses, but the profession, that ought to be more conservative,

into curious demands that border on the extravagant if not ridiculous.

We devoted considerable space in the JOURNAL to an analytical review of the former edition, so we need not trench upon the valuable time of our readers with this subject now, particularly as nothing has since been put forth to demonstrate that we committed any error of judgment in our criticisms, pro or con, passed at that time.

In this edition "it was found necessary to rewrite the greater portion of chapters xi., xii., xiv. and xvi., and add new chapters on subinvolution and chronic inflammatory diseases of appendages," because "so considerable has been the progress of definite knowledge in the art."

Graphic representations of the law of Ohm and of the laws of current diffusion have been added to the appendix for the convenience of students. The book is handsomely printed, and bound in the same style as the former edition.

TERMINOLOGIA MEDICA POLYGLOTTA. A Concise International Dictionary of Medical Terms. Compiled by THEODORE MAXWELL, M. D., Camb., B. Sc., Lond., F. R. C. S., Edin.; with the Assistance of Nine Collaborators. In Latin, English, French, German, Italian, and Spanish. 8vo; pp. xvi. - 459. London: J. & A. Churchill. Paris: G. Masson. Philadelphia: P. Blakiston, Son & Co. 1890.

This work is unique in medical literature, and represents an enormous amount of painstaking work by the author. Its declared purpose is "to assist medical men of various nationalities to read the medical literature of other countries."

It embraces about 25,000 words, probably a sufficient number for the needs of those who will seek the assistance of its pages, and French has been selected as the key-language. Its arrangement is simple and convenient, and it must become an indispensable part of the library to those who would perfect themselves in medical terminology; hence teachers, writers, and scholars will appreciate and possess it. The letterpress, paper and binding are beautiful.

HOW TO EXAMINE FOR LIFE INSURANCE. By JOHN M. KEATING, M. D., President of the Association of Life Insurance Medical Directors, etc. 8vo: pp. viii.—204. Philadelphia: P. Blakiston, Son & Co. 1890.

This is the most practical manual on this subject that has yet been offered as a guide to the medical examiner for life insurance. The author has had a large experience as a medical director of one

of the great life insurance companies, and it would, therefore, naturally be expected that he would deal with nothing but the useful and indispensable in a work of this kind. The plates and illustrations are such as contribute to aid diagnosis, and are well executed. Plate III. is especially to be noted for its anatomical and artistic perfection.

It would be well if the decision of the Supreme Court of Pennsylvania, defining the general object of life insurance, quoted in this opening chapter, were printed on every policy. It would disabuse the public mind of a prevalent notion that some principle other than that of indemnity against loss pertains to life insurance.

Every life insurance examiner should possess this book, even though he may be experienced in this work, for it contains much that is needful in the way of reference that cannot be found grouped elsewhere.

BOOKS AND PAMPHLETS RECEIVED.

Essentials of Anatomy and Manual of Practical Dissection, together with the *Anatomy of the Viscera*. Prepared especially for Students of Medicine. By Charles B. Nancrede, M. D., Professor of Surgery and of Clinical Surgery in the University of Michigan, Ann Arbor; late Senior Surgeon to the Episcopal Hospital; late Surgeon to the Jefferson Medical College Hospital; late Professor of General and Orthopedic Surgery in the Philadelphia Polyclinic, etc. Third edition, revised and enlarged, based upon the last edition of Gray's directory. Thirty handsome full-page lithographic plates in colors, and 180 fine wood-cuts. Small 8vo; pp. x.—388. Philadelphia: W. B. Saunders. 1890.

Essentials of Refraction and the Diseases of the Eye. By Edward Jackson, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. **Essentials of Diseases of the Nose and Throat**. By E. Baldwin Gleason, S. B., M. D., Surgeon in Charge of the Nose, Throat and Ear Department of the Northern Dispensary of Philadelphia, formerly Assistant in the Nose and Throat Dispensary of the Hospital of the University of Pennsylvania, etc. Saunders's Question Compends No. 14, with 118 illustrations. 12mo; pp. viii.—276. Philadelphia: W. B. Saunders. 1890.

Railway Surgery. A Practical Work on the Special Department of Railway Surgery. For Railway Surgeons and Practitioners in the General Practice of Surgery. By C. B. Stemen, M. D., LL. D., Professor of Surgery in the Fort Wayne College of Medicine; Surgeon to the St. Joseph Hospital; Chief Surgeon of the Western Division of the

Pittsburgh, Fort Wayne & Chicago R. R., with numerous illustrations. 8vo; pp. 315. St. Louis: J. H. Chambers & Co. 1890.

Tenth Annual Report of the State Board of Health of New York for the Year 1889. Transmitted to the Legislature, February 20, 1890. 8vo, paper; pp. 532. Albany: James B. Lyon, State Printer. 1890.

Report of the Superintendent of Education of the City of Buffalo 1889-90. By James F. Crooker, Esq. Buffalo: Times Printing House. 1890.

The Pharmacology of the Newer Materia Medica, embracing the Botany, Chemistry, Pharmacy, and Therapeutics of New Remedies. Part I., Nov., 1889. Part II., Dec., 1889. Part III., Jan., 1890. Part IV., Feb., 1890. Part V., March, 1890. Detroit: George S. Davis. 1890.

I. University of the State of New York, Regents' Bulletin. No. 1. June, 1890. Laws, Ordinances and Forms.

II. Examination Department. Existing Laws Controlling the Practice of Medicine in the State of New York. Albany: University of New York. 1890.

Pierson-Sperling Lehrbuch der Electrotherapie. Fünfte Auflage bearbeitet von Dr. Med. A. Sperling, Berlin, mit 87 Abbildungen. Leipzig. Verlag von Ambr. Abel. 1890. Cloth, 12mo; pp. 355.

Price List and Subscription Catalogue of the Harderfold Hygienic Underwear. Manufactured and sold by the Harderfold Fabric Co., Troy, N. Y., U. S. A.

The Constitutional Treatment of Caries and Necrosis. By Hal. C. Wyman, M. S., M. D., Professor of the Principles and Practice of Surgery and Operative Surgery in the Michigan College of Medicine and Surgery. Detroit: Reprint from *The New York Medical Journal*.

The Medical Calendar. A Quarterly Compendium of Seasonable Therapeutics and Diatetics. Vol. I., No. 3. New York: Reed & Carnrick. 1890.

Dosimetry in Colorado. By J. E. McNeil, M. D. Reformation in the Practice of Medicine. By the same author. New York: W. J. Munson. 1890.

Cornell University, College of Agriculture. Bulletins of the Agricultural Experiment Station, Horticultural Division. XVIII. July, 1890. Experiences in Spraying Plants. XIX. Report upon the Condition of Fruit-Growing in Western New York. Ithaca, N. Y. 1890.

Report of the Buffalo Medical and Surgical Dispensary from January 1, 1889, to January 14, 1890.

Report of the Commission on New Asylum for Insane Criminals of the State of New York. Transmitted to the Legislature March 17, 1890 Albany: James B. Lyon, State Printer.

Cleanliness in Maternities. By Joseph Price, M. D., Physician to the Preston Retreat, Philadelphia. Reprint, *Medical and Surgical Reporter*, July 26, 1890.

A Case of Hematoma of the Ovary following Chronic Catarrhal Salpingitis, with Operation and Recovery. By R. Harvey Reed, M. D., Surgeon to the Baltimore & Ohio R. R., etc. Reprint, *Cincinnati Lancet-Clinic*, June 28, 1890.

Varicocele. By Thomas W. Kay, M. D., Scranton, Pa., ex-Surgeon to the Johanniter Hospital at Beyrout, Syria. Reprint, *Cleveland Medical Gazette*, December, 1889.

Report of One Year's Work of Intra-Pelvic Surgery for the Relief of Inflammatory Diseases. By Rufus B. Hall, M. D., Surgeon to the Cincinnati Free Hospital for Women, Professor of Gynecology, Cincinnati Polyclinic, etc. Reprint, *Lancet-Clinic*, June 21, 1890.

Report of a Case of Cholecystotomy, with Exhibition of Specimens. By Rufus B. Hall, M. D., Surgeon to the Cincinnati Free Hospital for Women; Fellow of the American Association of Obstetricians and Gynecologists, etc. Reprint, *Times and Register*, July 5, 1890.

A New Operation for Prolapsus of the Vaginal Wall. By Andrew F. Currier, M. D. New York. Reprint, *Annals of Gynecology and Pediatrics*, July, 1890.

A Successful Case of Nephrectomy. By George Ben. Johnston, M. D., Richmond, Va., late Professor of Anatomy, Medical College of Virginia, etc. Reprint, *Virginia Medical Monthly*.

Transactions of the American Dermatological Association at its Thirteenth Annual Meeting, held at Boston Medical Library, Boston, Mass., on the 17th, 18th and 19th of September, 1889. Reported by George H. Tilden, M. D., Secretary. New York: 1890.

The Limits of Vaginal Hysterectomy for Cancer of the Uterus. By Henry C. Coe, M. D. New York: Reprint *American Journal of Obstetrics*, June, 1890.

Coeliotomy: This, and not Laparatomy, is the Proper Greek Synonym of Abdominal Section. Laparatomy being an Incision of the Flank only. By Robert P. Harris, A. M., M. D., Philadelphia, Fellow of the College of Physicians, etc. Printed for the author by Wm. J. Dornan, Philadelphia. 1890.

The Use and Abuse of Soap and Water, By Merrill B. Ricketts, M. D., Professor of Dermatology and Syphilography Cincinnati Polyclinic. Reprint, *Journal of Cutaneous and Genito-Urinary Diseases*.

Cholecystotomy. By Edward Ricketts, M. D., Professor of Gynecology and Abdominal Surgery. Cincinnati Polyclinic, etc. Reprint, *The Pittsburg Medical Review*, May, 1890.

External Surgery of the Nose. by B. Merrill Ricketts, Ph. B., M. D., Professor of Dermatology and Syphilography. Cincinnati Polyclinic, etc. Reprint, *Journal American Medical Association*, June 11, 1890.

Functional Nervous Diseases of Reflex Origin. By Albert Rufus Baker, M. D., Professor of Ophthalmology in the Medical Department Wooster University, Cleveland, O. Reprint, *Journal American Medical Association*, May 21, 1890.

The New Treatment of Peritonitis. By Emory Lanphear, M. D., Kansas City, Surgeon to the East Side Dispensary, etc. Reprint, *Kansas City Medical Index*, July, 1890.

HEALTH BULLETINS.

Michigan State Board of Health. August 7, 1890.

Newport, R. I., July, 1890.

New York State Board of Health, June, 1890.

Tennessee State Board of Health, August 20, 1890.

Abstract of Sanitary Reports. U. S. Marine Hospital Bureau, Washington, D. C. Vol. V., Nos. 31, 32, 33, and 34.

Restriction and Prevention of Diphtheria. Document issued by Michigan State Board of Health.

MEDICAL COLLEGE ANNOUNCEMENTS FOR 1890-91.

University of Buffalo, Medical Department.

University of Buffalo, Department of Pharmacy.

University of Maryland, School of Medicine.

Syracuse University, College of Medicine.

Medico-Chirurgical College of Philadelphia.

Hahnemann Medical College and Hospital, Chicago, Ill.

DENTISTRY is to be taught as part of the surgical course in the medical colleges of Italy. Every one desiring to practice dentistry must hereafter take a medical degree.—*Coll. and Clin. Record*.

OVARIOTOMY is said to have been performed upon women many times before any experiment upon the lower animals was made.—*Id.*

Miscellany.

RECENT PATENTS IN MEDICINE AND SURGERY.

Reported by CHARLES J. GOOCH, Esq., Patent Attorney, Washington, D. C.

AIROZONIZING apparatus, J. C. Kennedy, Detroit, Mich.; making Chlorine, E. Solvay, Brussels, Belgium; Evaporating apparatus, T. Guant, Brooklyn, N. Y.; Nursing bottle nipple, (two patents,) A. C. Eggers, Brooklyn, N. Y.; Speculum, R. P. & C. H. McCully, Brooklyn, N. Y.; Reservoir syringe, S. E. Cook, Holdrege, Neb.; Temperature regulator, L. F. Easton, La Crosse, Wis.; Capsule dipping machine, J. Krehbiel, Kalamazoo, Mich.; Capsule stripping machine, J. Krehbiel, Kalamazoo, Mich.; Cutting gelatine capsules, J. Krehbiel, Kalamazoo, Mich.; Dental engine motive gear, P. Brown, Montreal, Can.; Artificial denture, N. J. Goodwin, Hartford, Conn.; Disinfectant, H. M. Baker, Brooklyn, N. Y.; Surgical forceps, F. W. Groth, Chicago, Ills.; Administering medicine to animals, W. H. H. Doty, Paterson, N. J.; Obtaining acetic acid and methyl alcohol, F. C. Alkier, Wieselburg-on-the-Erlauf, Austria, Germany; Rosinduline sulpho acid, C. S. Chraube, Ludwigshafen-on-the-Rhine, Germany; Remedial cosmetic, C. J. Wilkins, Denver, Col.; Fountain syringe, C. A. Tatum, New York, N. Y.; Soda water dispensing apparatus, J. W. Tufts and J. Ramey, Medford, Mass.; Making thio-oxydiphenylamine, M. Lange, Amersfoot, Neth.

July 22: Making acetic acid, I. A. F. Bang and M. C. A. Ruffin, Paris, France; Producing bisulphites, C. Cornwell, Ypsilanti, Mich.; Bisulphite solutions, T. P. Burgess, Dedham, Mass.; Dental mold, L. F. Seeger, Jr., Ahnapee, Wis.; Fracture apparatus, T. M. Miller, Medford, Wis.; Inhaler, J. D. Averell, Manchester, N. J.; Inhaler and respirator, H. F. Williams, Brooklyn, N. Y.; Obtaining oxygen from air, A. Brin, London, England; Poultice holder, C. S. Hirst, Philadelphia, Pa.; Surgical apparatus, W. L. Hendrick, Boston, Mass.; Surgical knife, G. Dittert, Neustadt, Saxony; Surgical splint, L. Reenstierna, Boston, Mass.; Clinical thermometer case, H. J. Green, Brooklyn, N. Y.; Artificial tooth, C. H. Land, Detroit, Mich.

Patents granted July 29, 1890: Abdominal supporter, H. E. Rogers, Portland, Me.; Dental Vulcanizer, J. E. Quinn, Boston, Mass.; Inhaler, G. W. Nutz, Philadelphia, Pa.; Inhaler and Spirometer, W. A. Shepard, Elgin, Ill.; Artificial leg, G. Beacock,

Montreal, Canada ; Pharmaceutical powder divider, W. F. Dessau, Chicago, Ill.; Obtaining pepsin, J. Brill, Philadelphia, Pa.; Salve, J. J. Ryan, Brooklyn, N. Y.; Surgical splint, G. Beacock, Montreal, Canada.

Patents granted Aug. 5, 1890 : Dental mallet and pliers, A. O. Corey, Council Grove, Kan.; Disinfectant, W. F. Simes, Philadelphia, Pa.; Inhaler, J. S. Kinnear, Golden, Colo.; Artificial leg, H. C. Wintermute, Kansas City, Mo.; Artificial limb, H. S. Swank, Columbus, O.; Solidified perfume, G. H. Dubelle, New York, N. Y.; Washing the fumes of sulphur, Montgomery & Warnke, New Orleans, La.

Atomizer, P. J. McElroy, Cambridge, Mass.; Hospital bedstead, F. L. Bryant, Chicago, Ill.; Capsule-dryer, T. C. Merz, Detroit, Mich.; Nitro-cellulose, G. M. Mowbray, North Adams, Mass.; Spray diffuser, E. W. Mackensie-Hughes, Chicago, Ill.; Truss, Brownlow & Warner, Ogdensburg, N. Y.

TRADE-MARKS.

Cough remedies and blood-purifying compounds, F. V. D. Smith, Croton Falls, N. Y.; Deodorizers, disinfectants, liniments, ointments, Ellingwood & Co., Lowell, Mass.; Injections and lotions for venereal diseases, W. M. Ryals, Lumber City, Ga.; Medicine for headache, nervousness, sea-sickness and nausea, H. deWindt, London, England ; Tonic and blood purifier, Kopp & Litchenberger, Asheville, N. C.; Tonic and remedy for asthma, &c., Kopp & Litchenberger, Asheville, N. C.; Remedy for liver and kidney complaint, O. S. Greenleaf, Holyoke, Mass.; Remedy for diseases of the brain, nerves and muscles, Peruvian Medicine Co., Cincinnati, O.; Remedy for diseases of the nervous and sexual system, C. S. Hardy, Boston, Mass.

Trade-marks issued July 22, 1890 : Artificial milk, A. Schnell, St. Louis, Mo., the word, "Kefyr;" Tonics and malt extracts, Broening Bros., Lincoln, Neb., a star in outline, with a circle upon the center of the star ; Syrup of amorphous quinine, Paris Medicine Co., Paris, France, the word "Febriline;" Medicinal tablets, Sharp & Dohme, Baltimore, Md., the word "Pan-Peptic;" Liquid ergot of rye, Sharp & Dohme, Baltimore, Md., the word "Ergo-tole;" Liniment, C. Schlayer, Philadelphia, Pa., the words "Pain Slayer;" Vegetable compound for certain diseases, A. Swanson, Jamestown, N. Y., the word "Kalmar;" Bitters, R. Y. McWilliams, New Orleans, La., the word "Beacon;" Carbonated beverages,

Union Bottling Co., New York, N. Y., the words "The Golden Key Brand" and the representation of a key; Flavoring syrup for soda water, H. B. Mykrantz, Kansas City, Mo., the words "Champagne Mist"; Perfumery, J. L. Grossmith, London, England, the word "Ihasu-no-hana"; Compounded medicines, The Home Medication Co., New York, N. Y., heraldic garter, words "The Home Medication Co.;" representation of a mortar and pestle, a flying dove, and the words "Health," "Purity," "Beauty"; Pills, The Aphro Medicine Co., Portland, Ore., the words "Faber's Golden Female"; Remedy for dyspepsia, catarrh of the stomach, ulcers and other microbial diseases, The Drevet Mfg. Co., New York, N. Y., the word "Hydrozone."

Trade-marks issued July 29, 1890: Medicated toothpicks, E. E. Burson, Rockford, Ill., representation of a rustic diamond-shaped frame formed of toothpicks, enclosing the words "Medicated Toothpicks"; Remedy for diseases of the digestive organs, F. N. Glass, New York, N. Y., the word "Tryphosa"; Certain named medical remedies, W. G. Lewi, Albany, N. Y., a portrait of the face of Dr. John Swinburne, formerly of Albany, N. Y.; Medicines for certain diseases of men and animals, E. S. Sloan, Boston, Mass., a portrait of the registrant; Chemical preparation for bleaching purposes, The Drevet Mfg. Co., New York, N. Y., the word "Ozonine"; Remedy for the destruction of bacteria, microbes and germs in the human system, Drevet Mfg. Co., New York, N. Y., the word "Glycozone"; Florida water, American Florida Water Co., New York, N. Y., representation of a vase containing a white, a red, and a yellow rose; Remedy for wounds, Sommer Bros., Hawkinsville, Ga., a circular band, at opposite sides of which are arranged two crescent-shaped figures.

Trade-marks issued Aug. 5, 1890; Emollient, W. Casler, Chicago, Ill., the word "Oriental"; Ointment, W. B. Eddy & Co., Whitehall, N. Y., the words "Quinn's Ointment"; Peroxide of hydrogen, Drevet Mfg. Co., New York, N. Y., the word "Marchand."

Trade-marks issued Aug. 12, 1890: Rheumatic liniment, Smith & Parr, Washington, D. C., the word "Rheumaticide" in red letters and in a curved line; Remedies for diseases of the throat and lungs, T. V. Sords, Cleveland, O., the word "Broncha" in script letters; Oil of lemon, Dodge & Olcott, New York, N. Y., the word "Limoniano"; Oil of bergamot, Dodge & Olcott, New York, N. Y., the word "Bergamottino"; Oil of orange, Dodge & Olcott, New York, N. Y., the word "Aranciano"; Blackberry brandy,

Rheinstrom Bros., Cincinnati, O., a monogram of the registrant's firm, "R. Bros.," surrounded by a wreath composed of a blackberry vine; Remedy for certain named diseases, S. E. Root, Rochester, N. H., the words, "Bureau of American Remedies."

LABELS.

Labels registered for the past month: Dr. W. T. Rowsey's Never-Failing Whooping Cough Remedy, H. F. Rowsey, Toledo, O.; Syrup of Figs, California Fig Syrup Co., San Francisco, Cal.; Mrs. L. Schmidt & Co.'s Healing Liniment, Mrs. L. Schmidt & Co., New York; Almond Nut Salve and Almond Nut Cream, M. E. Murray, Chicago, Ill.; Hot Springs, Eczema Powder, N. Lichty, Des Moines, Iowa; Half Dollar Box of Chemicals, H. L. Corbit, Brooklyn, N. Y.; Medicated Food, J. Elliott, Indianapolis, Ind.; Schreibers' Tonic, J. D. Schreiber, Allentown, Pa.; Glycozone, for a medical remedy, Drevet Mfg. Co., New York, N. Y.; Syrup of Figs, California Fig Syrup Co., San Francisco, Cal.; Casey's, for an adhesive plaster, F. M. Casey, Mount Vernon, N. Y.

THE volume descriptive of the Johns Hopkins Hospital, prepared by Dr. John S. Billings at the request of the Trustees, is now ready for distribution. It contains fifty-six large quarto plates, phototypes and lithographs, with views, plans and detail drawings of all the buildings, and the interior arrangement—also wood-cuts of apparatus and fixtures. It has 116 pages of letter-press, describing the plans followed in the construction, and giving full details of heating apparatus, ventilation, sewerage and plumbing.

The volume is issued in three styles: bound in half-morocco, \$9.00; bound in cloth, \$7.50; bound in light boards, \$5.00. In the copies bound in half-morocco and cloth the plates are separately mounted on guards. The edition is limited to 750 copies.

The volume will be sent, expressage paid by the publisher, on receipt of the sum named above.

Orders and subscriptions should be addressed to THE JOHNS HOPKINS PRESS, BALTIMORE, MARYLAND.

"THERE'S MILLIONS IN IT."—The neatness with which German drug houses patent and trade-mark a medicine, and then make the doctors free advertisers for it, betokens a certain shrewdness in the German mind and vacuity in the American mind that is not credited

to them respectively by tradition. When an American patented and trade-marked medicine goes to Europe, it is quietly led to the door and the official boot-toe makes one vigorous outward sweep, there is a dull thud and—exit patent medicine. Antipyrin, sulphonal, and other German patent medicines meet with quite a different reception in America, as everyone knows, though perhaps everyone does not know that they are virtually patent medicines. Mrs. Winslow, Castoria, S. S. S., H. H. Warner, and other great medicine men of Yankeedom, ought to go to Europe and sit at the feet of their German brethren as pupils.—*Home Recorder*.

WYETH'S BEEF JUICE is the name of a new Concentrated Extract of Beef just placed on the market by that well-known firm John Wyeth & Bro., of Philadelphia. If it is on a par with the other products of this house, it will only be necessary for them to inform the medical profession that they are ready to supply it. Their advertisement page reads as if they felt sure of their footing in this matter.

THE latest strategy of a Paris paper for attracting readers is the engagement of two eminent physicians to attend gratuitously upon its annual subscribers. Recently the manager of the paper gave notice to one of the physicians "not to prescribe for B any more; his subscription has expired." The doctor replied: "So also has B."

AN ENGLISH edition of *The Ladies' Home Journal* is to be brought out in London on a scale never before attempted by an American magazine, and Mr. Cyrus H. K. Curtis, proprietor of the *Journal*, and Mr. Edward W. Bok, the editor, sailed for Europe in July to perfect arrangements.

Notice to Contributors.—We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the JOURNAL should be handed in before the first day of the month.

The Editors are not responsible for the views or opinions of contributors.

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Original Communications.

INSANITY AS A SYMPTOM OF BRIGHT'S DISEASE.¹

BY ALICE BENNETT, M. D., PH. D., of Norristown, Pa.

I HAVE wished, if possible, to make this half hour, during which I have the honor to address you, of some interest, more especially to the general practitioners of medicine, who make up the great bulk of the society. To that end I have determined to ask your attention, not to a review of the year's work in the department which I represent, a custom which has come to be "honored in the breach" quite as often as in the observance, but to a field where the labors of the specialist and of the general practitioner meet in close relation, and where the observations upon either hand have been few and incomplete. My subject is Insanity as a Symptom of the so-called Bright's Disease, or Diseases, a name which, unsatisfactory as it has become, we are yet not prepared to throw away.

The growth of our knowledge has hitherto been hindered by the too sharply drawn line which has divided the doctors who study the diseases of the body, on the one hand, from those who are studying the diseases of the mind, upon the other. The general practitioner has been too apt to stand aloof and gaze upon the spectacle of the "human mind diseased" as a something outside his ken; under the influence of forces new and strange — as "outstanding exceptions of humanity, unintelligible except on psychological hypotheses" — to which he supposes the alienist to possess some key all his own; while, on the other hand, the "insane doctors" have been so much absorbed in following and classifying the bewildering windings of the disordered mind that they have too often forgotten the body.

But I take it as a cheering sign when, from the ranks of the alienists themselves, come words like these²:

1. Address on Mental Disorders delivered before the Medical Society of the State of Pennsylvania at Pittsburgh June 19, 1886, from advance sheets from the Transactions.

2. John Brierley, *Twentieth Century*, June, 1890.

The psychological theory of insanity has prevented advance in the study of those forms of disease of which mental alienation is the most prominent, but by no means the sole, or even the most important, symptom. Blinded by this glamour of psychology, we have lost nearly a century of observation, and have frittered away the lives of hundreds of good men. Let me repeat here also the words of the member who last occupied this chair¹: If there be one thought in this connection which ought never to be forgotten, it is, that *human mind diseased is the human mind still*. The coming on of insanity marks *not* the appearance of a new entity or a new force. *Our so-called mental diseases are simply groups of symptoms.*

This is the fundamental thought which I want to emphasize. Insanity is a symptom, or group of symptoms; not always, not in the majority of cases, at least in its beginnings, a symptom of integral disease of the organ whose perverted action it is, but of faulty conditions external to it. Whatever the initial step leading to disordered brain action, (I am speaking now of "ordinary insanity" in the sense used by Sankey, excluding that which is organic or developmental,) the remote effects are similar; whether beginning as mania or melancholia, it ends sooner or later (*i. e.*, if the morbid process be not checked,) in dementia, that is, the limited function of a more or less impaired brain tissue. To the general practitioner alone, in the great majority of cases, comes the opportunity to study insanity in its inception, and to investigate the perverted bodily functions which determine the nutritive changes leading to disordered brain action, when only preventive measures may often be attended with gratifying results.

When we consider the marvelously delicate structure of the brain, whose susceptibility to every impression is, in fact, its function, is it not self-evident that any defect in the nutritive processes upon which its integrity depends, any deterioration in the quality of the blood or in the manner of its supply, will be liable to influence its action? And this, by a majority of the writers on mental diseases, is conceded in theory, if denied in practice.

Schroeder von der Kolk says²: "Among the causative forces acting on the brain, the first place must be given to the blood." *Blandford* says³: "Could we comprehend the blood supply of the brain beyond all manner of dispute, we should go far toward explaining most of the phenomena of brain function and of brain

1. Dr. H. C. Wood, 1888.

2. *The Pathology and Therapeutics of Mental Diseases.*

3. *Insanity and its Treatment*, Edinburgh, 1884.

disorder." And again: "The life and functions of the highest cerebral centres are disordered by interruption in their natural nutrition; if there is a defect—an impoverished blood, or a blood poisoned by deleterious ingredients, the effects must be visible in the functions of the brain."

This is logic and common sense; it is also physiology, and it is difficult to follow this author when, in his chapter on pathology, he reviews the organs most concerned in a pure and equable blood supply, as follows: "*Hearts* are frequently morbid, but we are not to connect these with the outbreak of insanity." "In the pathology of commencing insanity the *kidneys* play a very unimportant part." "I believe the *liver* has little to do with the pathological condition of a patient who has recently become insane," etc. Griesinger says: "Many cases that terminate fatally in the acute stage present pretty much the appearance of the normal brain; often enough to lead to the conclusion that the symptoms during life were due to some disturbance in the process of nutrition as yet unknown to science." Sankey¹ separates what he calls "ordinary insanity" from paresis, epilepsy, organic and developmental insanity. Speaking of the etiology of "ordinary insanity," he says: "The disease consists in a morbid state of the blood, or of the processes concerned in nutrition."

His *résumé* of the morbid anatomy in insanity is at once so comprehensive and so concise, and bears so directly upon our subject, that I make no apology for quoting it:

During the earlier period of the disease (Sankey regards mania and melancholia as only differing manifestations of one morbid process), the symptoms are due to an alteration in the blood, in its quality and in its amount; there is some congestion with interstitial deposit of serum and of protein compounds; then atrophy of the brain substance and hypertrophy of the vessels. At first the symptoms are due to the circulation of impure blood; they next are due to excessive supply; then they evidence the imperfect function of an altered cerebral tissue.

Coulston says of melancholia: "It is a constitutional disorder of the brain developed out of hereditary tendency and excited into action by peripheral disease in some other part of the body." Accepting, then, the self-evident fact which, moreover, has the support of the high authorities named, that "ordinary insanity" in its first stage depends upon some defect in the quality, or the mode of supply, or both, of the blood, we can hope to get some

1. Lectures on Mental Disease, London, 1884.

light upon the causes of insanity only by studying the organs which have to do with the blood production, purification and supply. In this vast field, where so many avenues of inquiry open, I shall attempt no more than to make some suggestions along one path in which my own clinical experience has happened to lead me.

It is understood, of course, that no organ, or system of organs, acts independently; that there can be no absolute separation of the study of one from the study of another,—as, for example, the liver, kidneys and heart, often related links in one morbid process—nevertheless each has its definite function, interference with which is followed by equally definite consequences.

By "Bright's disease" we no longer understand a morbid process affecting the kidneys only, but whether we consent to accept the kidney lesion as a part of a general "arterio-capillary-fibrosis" (after Gull and Sutton), or with Dr. A. V. Meigs, look upon it as a localized expression of a general "endarteritis," the fact is undisputed that at some stage in the train of morbid processes, covered by the monumental name "Bright's disease," lesions of the kidney do exist; their function is interfered with; to a greater or less extent they fail to separate certain waste products from the blood, which being retained and circulated through the body produce toxic effects which we have been accustomed to group under the general term "uremia," or "uremic poisoning."

I must pass by, as not essential to my purpose, any consideration of the various theories concerning the nature of these nitrogenous waste products, and confine myself to some observations upon their effects, which my experience has led me to believe are more varied and far-reaching than has generally been supposed.

There has been a general impression abroad that diseases of the kidney are not common among the insane, founded upon statements to that effect in most of the text-books and perpetuated by the very general absence of systematic and careful observations in this direction. Griesinger, in his work on Insanity, says: "Anomalies in the urinary secretion may be much more frequent," *i. e.*, among the insane, "than is generally supposed. Unfortunately, any reliable researches upon this important subject are still wanting."

My attention was first arrested by the clinical observation of the very constant coincidence of some form of mental pain or distress, *i. e.*, melancholia, with the physical signs in the urine of disturbed kidney action; this is not invariable, but the rule. We have cases of undoubted mania associated with a uremic condition, and, on the

other hand, cases of melancholia without it; as, for example, in some conditions of grave heart lesions with general debility, and some transitory cases associated with disturbed liver action with the uric-acid formation.

[A. Haig, in an article in the *London Practitioner*, Vol. xli., No. 5, on "Mental Depression and the Excretion of Uric Acid," speaks of the demoralizing influence of uric acid upon the nerve centres, and explains the well-known fact, that states of mental depression are intensified in the morning by the increased alkalinity of the blood at that time, and consequent greater solubility of uric acid. We know that our melancholic patients are worse and that suicidal impulses are to be specially guarded against in the early morning.]

Briefly formulated, my experience has led me to believe—

1. That, contrary to generally received opinion, affections of the kidney are very common among the insane.

2. That "uremic poisoning" is one of the most frequent causes of insanity.

3. That while the mental manifestations may be as varied as there are different centres subjected to irritation by these unknown poisons, the most prominent and constant symptom is some form of *mental pain*, which may range from simple depression, through all degrees and varieties of delusions of persecution, self-condemnation and apprehension, with or without hallucinations, up to a condition characterized by a frenzy of fear, with extraordinary motor excitement, and rapid physical prostration, the "grave-delinium" or "typho-mania" of some authors.

4. That the motor centres are specially liable to affection, as evidenced by the restlessness and incessant activity of many cases, less frequently by convulsions and convulsive twitchings; occasionally by choreic movements; occasionally by cataleptoid states.

Undoubtedly there is much more of Bright's disease" in the community than appears on any record book, the interstitial form often running a very long course, frequently unrecognized. Persons subject to "bilious attacks" and "sick-headaches"; to obscure neuralgias; to crawling sensations (often described to me "like the flowing of water" over the part affected) in the head and especially in the back of the neck; people who are "tired all the time," who have sleepless nights, or occasional night terrors; who have unexplained attacks of sudden weakness, or periods of low spirits without cause; who show an unnatural irritability, or a gradual change of character or disposition; those who are subject

to gout, rheumatism, chorea, skin eruptions, to itchings of the surface of the body, either local or general—all these may well be suspected of dangerous tendencies.

I need not say that numberless cases of slow kidney trouble live long and fairly comfortable lives without showing any mental disturbance, and that many others run a rapid course to death without such complication. We must assume, in some cases, a toxic impression of overwhelming power, but, doubtless, some brains are predisposed, by inheritance or otherwise, to an easy overthrow of the mental balance. This seemed plain in many of my cases. In such a one, given a chronic nephritis, or even without it, insanity may be induced by anything that increases the burden thrown upon the kidney, diminishes its working-force, or interferes with other excretions. Such causes are: improper diet; long-continued constipation; sudden exposure to cold; pregnancy, or any unusual interference with the circulation; overwork of body or mind and especially worry; intercurrent disease, or anything that depresses the system and lessens its power of resistance. The influenza epidemic in the beginning of the present year sent us a number of cases of melancholia which belong in this category. (See Cases LVI., LVII. and LIX.) A factor which cannot be left out of account in these cases is the heart; whether a coincident or resultant change, we know that, with diseased kidneys, we are apt to have abnormal hearts, and it is an interesting question to what degree mental disturbance may be aided by some modification in the supply of blood to the brain, due to normal heart action.¹

Dr. Landon Carter Gray, of New York, read a very interesting and suggestive paper before the American Neurological Association, in 1889, on "Three Diagnostic Signs of Melancholia," with notes of sixteen cases illustrating the *association of mental depression, insomnia, and post-cervical ache*, which he has found so constant in his practice. Dr. Gray says: "The simple forms of melancholia are often extremely difficult to diagnosticate, especially in the early stage, as the reasoning powers, the memory, and the perceptions are then often seemingly unimpaired or not more affected than is possible from a myriad unimportant causes. Patients suffering from this mental disease too frequently figure as neurasthenics to be confidently treated as such, until some determined and frightful suicidal or homicido-suicidal attempt throws startling light upon the true nature of the malady. These, too, are the cases of unaccountable suicide which puzzle friends, and competing newspaper

1. In the Address in Mental Disorders, for 1884, the writer gave an analysis of 500 cases of insanity, 20 per cent. of which had some heart affection.

reporters account for so satisfactorily and sensationally upon some theory of rejected love or high-flown sentimentalism. Any certain diagnostic symptoms in this class of cases should be, for these reasons, of value.

. . . So firmly have I come to rely upon the association of this symptomatic triad," [i. e., mental depression, insomnia, and post-cervical ache,] "that I have lately made a diagnosis in two cases by means of it. The first patient was a gentleman who came to me complaining of a distress in the back of the head and neck, which at times was painful. I learned from him that the onset dated back to six years ago, when, as he said, he had been run down and depressed. I then told him that I would outline to him his symptoms at that time, and I proceeded to tell him that he had been very much depressed, had not been able to sleep, had thought of committing suicide, had been slightly confused in mind, and had remained in this condition for several months. He was amazed, and asked me if I was a mind-reader, finally admitting that he had passed through just such an attack of melancholia, which he had concealed from everybody, because he was then living in Burmah in the employ of the English Government, and was afraid that he would lose his position if thought insane."

I fully concur in all that Dr. Gray has so well said in this paper; but, in going a step farther and investigating the *causes* of insomnia and post-cervical ache, both among the most common symptoms of "uremic" blood poisoning, we shall find additional aids to diagnosis and safeguards against catastrophes like those mentioned.

In cases of Bright's disease with sudden invasion of melancholia, there is one feature so constant that I have come to regard it as diagnostic: it is the *sense of impending danger*, the overwhelming *fear* of some threatening calamity, which inspires the one irresistible impulse to "get away" which dominates the individual for the time, and under the influence of which he often jumps out of the nearest window. (See Cases LV., LVIII., XLVII., and others.)

To prevent insanity by recognition and treatment of the conditions leading to it will be our aim; frequently, however, so insidious is Bright's disease, and so unwilling are people generally to appear to make much of their little ailments, which would be such valuable indicators if revealed, that we know nothing of the state of affairs until some catastrophe has taken place. Even then it is worth much to be able to say why it has occurred, and even in unpromising cases gratifying results sometimes follow prompt treatment in the lines indicated, but prognosis must always be guarded.

I think that I can serve you best by presenting some clinical notes of cases with comments; but before going on to speak of my

own experience, I will ask you to look at the literature of the subject.

Books on diseases of the kidney say almost nothing of the effects of retained nitrogenous waste products upon the nervous system, except convulsions and coma, generally preceding death.

From all the works of insanity accessible to me I have gathered everything bearing on this subject that I could find.

From Bucknill and Tuke:¹ "The kidneys are remarkably free from disease in all forms of insanity. We have met with three cases of Bright's disease among the insane, and we have found the experience of others of a similar nature." They quote, with evident surprise, Howden, who had admitted twelve cases of albuminuria in three years, and who, in 235 post-mortem examinations, had found kidney disease in 86.

They admit two genuine cases of "insanity co-existent with the waxy form of Bright's disease," mentioned by Dr. Wright, in the *Report of the Royal Edinburgh Asylum*, for 1871, and speak also of a similar case recorded by Dr. Wilkes in the *Journal of Mental Science*, for 1869.

In connection with gout, Bucknill and Tuke say:

Outside the walls of asylums cases are frequently met with which are marked by *unfounded dread*, especially on awaking in the morning, in which there is a gouty diathesis, and suspicion is aroused that there is a causal relation between the bodily condition and the mental anguish. This suspicion is confirmed by the marked success of treatment founded upon this supposition.

Schroeder v. der Kolk, under "Sympathetic Insanity," records two cases of insanity accompanying vesical catarrh, of which one recovered; in the other an affection of the kidneys supervened, and the patient died.

Sankey found adhesion of the capsule of the kidney in one-half his cases post-mortem, and, "in a large number, other evidences of disease, as atrophy of the cortex, fatty degeneration, waxy disease, etc." This author does not seem to have made any study of the kidneys during life. The presence of kidney changes post-mortem he regards as "evidence that the blood has been impure" (emphasized by him as the first step in the production of "ordinary insanity," as quoted above); nevertheless, he concludes by saying: "I do not consider the true pathology of insanity to have any necessary relation to kidney disease."

1. Psychological Medicine.

Gowers calls attention to organic changes (as apoplexy), which may ensue from atheroma of the arteries in advanced Bright's disease.

Griesinger¹ says: "Bright's disease to which any etiological relation to insanity could be attributed is very rare indeed." One would much like the complete clinical record of a case like his No. 12, of which the following is a condensed abstract: "Delirium occurring in second pregnancy; formication and smarting over whole surface; a general sense of ill-being; sleeplessness; ringing in ears; vertigo; pulse hard; slight cardiac hypertrophy; recovered, and relapsed in the following year."

Or his No. 8: "Man; hepatitis in the beginning; variable temper; pain in lumbar region; burning in urethra and bladder; at times had gravel; died in a few months."

Blandford speaks of a variety of melancholia "usually ascribed to dyspepsia or disorder of the stomach and liver." He has also noticed that "melancholia often comes on, as a precursor of death at the close of other diseases."

In Clouston's² very interesting work I find more bearing upon this subject than in any other I have read, although I cannot always agree with this author in his interpretation of facts. For example, his two cases of diabetic insanity, which have been extensively quoted in other text-books. In case No. 2, a man who died after melancholia of two year's duration, with delusions of persecution, the diagnosis rested entirely upon one examination of the urine made near the close of life; no symptom had led to the suspicion of diabetes, and there was no post-mortem examination.

That some amount of sugar in the urine is frequently associated with chronic Bright's disease is well known; and I have twice met the condition noted in my Case VI., where, shortly before death-sugar appeared in large quantities in the urine, from which it had previously been absent.

His Case No. 1 was a "woman, aged fifty-nine; agitated melan, cholia; toward the end, sleepy all the time; urine never very copious; ordinary treatment of diabetes of no avail."

Clouston recognizes a "variety of mental derangement, half delirium and half mania, which results from uremic poisoning, which he names the "insanity of Bright's disease." . . .
"Usually occurring in chronic cases with contracted kidneys, where

1. Mental Pathology and Therapeutics.

2. Clinical Lectures on Mental Diseases, London, 1883.

there has been enlargement of the heart and a tendency to dropsy for some time," and he gives one illustrative case.

He has also noticed in such cases "mania of a delirious character, with extreme restlessness, with remissions, attended with great prostration" (the equivalent of the "grave delirium" of some authors, of which I shall want to speak again).

I was especially interested in Dr. Clouston's studies of melancholia, which is the one form of insanity I so constantly find associated with defective kidneys. He considers it under eight heads, as follows :

1. Simple melancholia.
2. Hypochondriacal melancholia.
3. Delusional melancholia.
4. Excited or motor melancholia.
5. Resistive melancholia.
6. Epileptiform melancholia.
7. Organic melancholia.
8. Suicidal and homicidal melancholia. .

These divisions are convenient, but it is needless to say that (excluding "organic," which seems to me out of place here) they are descriptive of mental states, rather than varieties of disease ; often transitory, passing one into the other in the same case. Etiologically, I would consider them all as one, including also stuporous melancholia, which Clouston considers under the separate general head "stupor." Of the "motor" and "epileptiform" varieties, he remarks that they are "specially liable to skin irritations, itchings, boils," etc.

The treatment that this author has found of most value in melancholia is, to me, significant : milk is his "sheet-anchor ;" farinaceous and fatty foods ; an abundance of fresh air ; baths, and especially Turkish baths, of which he says : "I have seen many chronic, incurable cases of melancholia improved by a course of Turkish baths."

In our own country there have been some special contributions :

In 203 autopsies at the Government Hospital for the Insane, at Washington, D. C., about one-sixth of the kidneys "presented alterations sufficient to constitute disease."

Prof. William Osler reported to the Philadelphia Neurological Society, in 1888, three cases of insanity associated with "Bright's disease" :

CASE I. — Man, aged forty-two, known to be the subject of "Bright's disease;" after three or four days of violent mania, died in a comatose condition.

CASE II. — Man, the subject of interstitial nephritis, admitted to the University Hospital in a semi-stuporous condition; had previously been maniacal, and had delusions of persecution; committed suicide by jumping from an upper window.

CASE III. — A man, with chronic "Bright's disease," who for a time refused food under the influence of delusions of persecutions; afterward improved.

Dr. L. Bremer, of St. Louis, in a paper read before the State Medical Society of Missouri, in April, 1888, details seven cases that have come under his observation:

CASE I. — Unmarried woman, thirty-eight; rheumatism and chorea at fourteen; albuminuria, following fall into cold water, of four years' duration; a second exposure followed by scanty secretion of urine, insomnia, irritability, mania of two days' duration, followed by melancholia with self-condemnatory delusions; attempted suicide on the ninth day, resulting in excessive hemorrhage, followed by sleep and rapid recovery. The urine contained albumin, hyaline and epithelial casts, pus, and blood corpuscles, disappearing with complete restoration to health.

CASE II. — Man, a drinker; acute rheumatism, with fever, tremors, spastic state of muscles, delirious insanity marked by intense restlessness and vivid hallucinations; urine contained enormous amount of albumin, hyaline and blood casts, which almost disappeared during a remission of three weeks, when mind was clear, and again increased with a relapse which ended in coma and death eight weeks from the inception of the disease. No post-mortem examination.

CASE III. — Woman, forty-eight; injury to head in childhood; puerperal mania at thirty-four; six years later, rheumatism with intense insomnia preceded a melancholia of several months' duration. Last attack followed prolonged exposure in a railroad accident: active delirium, with menacing hallucinations, coma: death one month from beginning of the attack. Albumin, epithelial and hyaline casts in urine.

CASE IV. — Woman, fifty-five; sciatica for ten years: an exceptionally severe attack, followed by mental confusion, quickly passing into coma and death. Urine contained epithelial and blood casts, and pus corpuscles.

Dr. Bremer's Cases V., VI., and VII. are somewhat complicated, and I pass over them here.

Dr. E. A. Christian, of East Michigan Asylum, reports¹ thirty-

1. *Journal of American Medical Association*, March, 1900.

seven out of 2,600 cases of insanity admitted to that hospital, "in which the appearance of grave disturbances of nutrition had been coincident with albumin and tube-casts in the urine; in only about a dozen could it be said that the mental manifestations were not dependent upon, or modified to some extent by, the renal disease." Of these cases he makes two divisions: One, the "uro-toxic;" two, the "vascular." I give condensed abstracts of his five cases, illustrating the first class, which he considers much less common than the second. (In this my experience is widely at variance with Dr. Christian's.)

CASE I.—Woman, thirty-four; convulsions, followed by insanity. at a miscarriage three years before. A second attack, also puerperal. two years later. Third and last attack also puerperal; "grave dyspeptic disorders and failing vision" in interim. Mostly "confused and restless;" a low muttering delirium. Died semi-comatose, in the third month of attack. Urine contained albumin, waxy casts, and debris. No autopsy.

CASE II.—A year of dyspeptic troubles, headache, frequent vomiting, eczema, etc., was followed, successively, by delusions of suspicion, hallucinations of sight and hearing, low delirium, and, near the close, intense excitability of the motor-centres, with spasms of all the voluntary muscles. Albumin, hyaline and granular casts in the urine. Death in four months. No autopsy.

CASE III.—Male, eighty-one; restless and irritable for eighteen months. Extravagant ideas, followed by delusions of fear, merging into general mental confusion; coma of five days, death. Albumin and casts in the urine.

CASE IV.—Male, forty-five; sequence of symptoms as follows: Peculiar and forgetful; confused; hypochondriacal; suspicious; religious delusions. Died, semi-comatose, in four months. No autopsy. Albumin and casts in urine.

CASE V.—Woman, fifty-seven; a fever of some sort, followed by causeless worrying, profound depression, delusions of suspicion, edema; albumin and casts in urine; asthenic; paroxysmal, asthmatic seizures, with cough; died of pleuritic effusion, more than two years from the beginning of insanity.

While I do not agree with the last-named writer as to the preponderance of the "vascular" over the "uro-toxic" cases, I freely concede the frequency and importance of the former class, among which belong many of our early apoplexies. I want to say also, in passing, that the relation between paresis and "Bright's disease" seems to me to require further investigation; we know that many

cases of paresis are associated with kidney disease, and I have seen cases, beginning as melancholia with uremia, pass into a condition similar to, if not identical with, paresis.

The cases which I present are all taken from the records of the Department for Women of the Norristown Hospital for the Insane. They are divided into clinical groups, and are condensed as much as possible.

First group.—Cases (12) rapidly fatal (twelve days to three months). I am persuaded that to this class belong many of the cases variously designated as “typho-mania,” “grave delirium,” etc., by different writers. Nothing more distressing, nothing more hopeless of even amelioration, can come either to the general practitioner or the specialist. Their characteristic features are intense motor excitement, with rapid physical prostration, a condition graphically described by Spitzka as follows :

Insomnia and inability to think, increased irritability, and a sense of impending misfortune precede the outbreak, which is often so sudden as to suggest the fulminating type of typhus, or of epidemic meningitis. There is wild, aggressive delirium — a panphobia — the patient jumps out of the window, beats the plaster from the walls, eats bedding, and clutches at his attendant with the frenzy of despair ; may sing, whistle, yell, and tear off clothing continuously for days. One patient kept plunging his head against the ceiling until beaten to a jelly. Another rubbed his thumb against his teeth until it hung by a thread.

Dr. Spitzka concludes, since “all the pathological changes of the brain noted post-mortem are only collateral results of disturbed circulation, and throw no direct light on the essential pathology of ‘grave delirium,’” that we must infer the “formation of a toxic agent in the nerve-centres themselves.”

CASE I. —, aged forty-two, American, married but deserted by husband ; general health said to have been poor during her married life ; had been “a little unlike herself” for the preceding five or six months. One week before admission to the hospital became actively insane, with extreme restlessness and increasing bodily depression. On admission showed most intense motor excitement which was most incessant for one week. This was followed by a week of great physical prostration in bed, ending in death on the fourteenth day, three weeks from the beginning of the attack. At times, during the last week, mind was quite clear. A few days before death a double pneumonia developed, which hastened the fatal issue. Urine contained albumin and hyaline casts on admission. Autopsy showed the large mottled kidneys of chronic, diffuse nephritis. Heart flabby, hypertrophied, and dilated. Liver enlarged. Lungs, red hepatization, except at apices.

CASE II. —, aged thirty-two, American, married, mother of three healthy children; paternal uncle insane; showed slight peculiarities for preceding year; apt to complain of "pain across back," but was not considered sick until ten days before admission, when violent insanity developed suddenly during the night; was kept in bed by mechanical measures, and was brought to the hospital, bound to a stretcher, over a distance of sixty miles. On admission she was in a semi-comatose condition; action of heart extremely feeble; urine loaded with granular and waxy casts and blood disks. She lived six days in this condition. Autopsy: Heart, organized clots in all cavities; aortic insufficiency. Kidneys, normal size, cortex thin and very fatty; one hemorrhagic infarct size of marble. Liver, "nutmeg" on section.

CASE III. —, aged twenty-nine, single, of Irish parentage, good family history. Reported good health up to three weeks before admission, when she became melancholy, with the delusion that the neighbors were defaming her character; persistently suicidal. On admission urine contained albumin, hyaline and granular casts; action of heart feeble. Death occurred after thirty-three days (in eighth week of attack), during which she was the subject of intense motor excitement with agonizing apprehensions. Once repeated rapidly for hours, in most piercing screams, "O God! where is my brother?" Fed with tube. No autopsy.

CASE IV. —, aged thirty-nine, of German extraction, wife of intemperate saloon-keeper, patient said to have drank beer in moderation; mother of eight children, three miscarriages during the preceding year said to have been artificially induced; domestic relations unhappy and general health not good for a year. Insanity developed suddenly, three weeks before admission, in the form of melancholia with suicidal and homicidal impulses; asked her friends "to put her in the asylum because she could not trust herself." On admission appeared well and continued sensible, cheerful, and industrious for three weeks; gave a clear history of her attack, and soon evinced a natural desire to go home and take her place in her family. One examination of the urine at this time gave negative results. Heart enlarged, with mitral systolic murmur. On twenty-second day she became melancholic; quiet, with tendency to stupor, but made several attempts to choke an unoffending fellow-patient; increasing mental dullness with rapid physical wasting for one week. On the eighth and ninth days (of this attack) showed extreme restlessness; would throw herself about the floor, beat the walls, scream, etc.; tenth day in bed; died on morning of eleventh day. A second examination of the urine made during this attack also gave negative results. Autopsy: Venous congestion everywhere marked; heart hypertrophied, with mitral leak; kidneys large, capsule thickened and removed with difficulty from a roughly granular surface; cortex, on

section, showed extensive fatty change; liver also showed fatty changes in a few places.

This case is interesting as showing the remission which is so frequently seen in the mental, as in other manifestations of "Bright's disease," and also as illustrating the necessity for repeated examinations of the urine.

CASE V. —, aged thirty-three, Irish, single, domestic, good family and personal history. One week before admission suddenly became wildly delirious; no previous symptoms noted. On admission she was excited, incoherent, and in constant motion of some sort. Urine loaded with granular and waxy casts. Lived nine days; delirium passed into semi-comatose condition for the last two days of life. Autopsy: Kidneys contracted, capsule adherent, cortex thin, cystic, and fatty. Some thickening of heart valves and numerous atheromatous patches in coats of arteries of the brain.

CASE VI. —, aged twenty-six, American, single; one paternal cousin insane; general health had been considered good, but slight failure of memory and a tendency to repeat words had been noticed for two years. Onset of insanity sudden, twelve days before admission, shown by incessant talking of delusions of a persecutory nature, insomnia, and restlessness. On admission, condition as described above; after one week, passed into a condition of semi-coma, which lasted a month, and she died in the seventh week of the attack. The urine contained a small amount of albumin, hyaline, epithelial, and granular casts. There was a mitral systolic murmur of the heart. Ten days before death the urine contained a considerable amount of sugar, although none had been found at two previous examinations. In the last week showed a tendency to convulsive twitchings of all the voluntary muscles; superficial sores readily followed slight irritations of the skin. Autopsy showed contracted and granular kidneys. Heart hypertrophied, with mitral leak.

CASE VII. —, aged thirty-eight, married, mother of five children. Invasion of insanity sudden, of one week's duration; lived eight days, after admission to the hospital, in a condition of restless delirium with rapid loss of flesh. Autopsy showed kidneys contracted and fatty; heart hypertrophied and dilated.

CASE VIII. —, aged forty-five, of Irish parentage. Dyspepsia for two years, somewhat depressed for four months; melancholia, with restlessness and delusions, for one week before admission to the hospital. Special delusions were that there was "a roaring lion inside" her body; at another time a "man," etc. Continuously restless; died eighteen days from the beginning of the attack. No autopsy. Urine contained albumin; no casts found.

CASE IX. —, aged twenty-six, Pennsylvania German, single, domestic; left service six weeks before through ill-health, but there

were no mental symptoms until two weeks before admission to the hospital, when she suddenly became deranged, screaming "The people are burning up!" Refused food and lost flesh rapidly. Died six days after admission, three weeks from the onset of mental symptoms. The urine contained albumin and many granular casts. The autopsy showed the kidneys much contracted, cortex granular and cystic.

CASE X. —, aged thirty, American, married, good family history. Had suffered from dyspepsia, but was considered fairly well up to eight weeks before admission to the hospital. Insanity characterized by apprehensions of disaster, suicidal attempts, and great restlessness. Lived twenty-five days. No autopsy. Urine contained hyaline and granular casts.

CASE XI. —, aged thirty-seven, American, widow, mother of five children. Had been running down in health for four months with some mental depression, but no obvious insanity until ten days before death, which was probably hastened by the fatigue of the journey to the hospital. She died after two days, during which she manifested great restlessness and mental distress, with apprehensions of injury. The urine contained albumin and granular casts. The autopsy showed kidneys granular and contracted, with a large cicatrix on the posterior surface of the left; heart very pale, flabby; insufficient valves.

CASE XII. —, aged forty-seven, American, widow. Sudden development of insanity; melancholia, with great restlessness, fear, screaming, etc., followed by death in twenty days. Urine contained granular casts. No autopsy. This case was complicated by swelling of both parotid glands a few days before death.

Second group.—Cases (12) less rapidly fatal (three months to nine and one-half years).

CASE XIII. —, aged fifty-nine, married, mother of two children; one maternal cousin insane. Melancholy for about two months before admission, with a remission of about one month, during which she seemed well; prominent mental features were delusions concerning her own body, apprehensions of injury and hallucinations of sight; at first very restless, but soon became quiet and markedly resistive; never stuporous, but seldom spoke; expression watchful, suspicious, and despairing: often required mechanical feeding; at times seemed to suffer great pain, which, on two occasions, appeared to be relieved by the passing of a large quantity of bloody urine. Emaciation was rapid and extreme. The urine contained albumin, hyaline, and epithelial casts. Death occurred in the seventh week of her residence with us, the fifteenth from the beginning of insanity.

CASE XIV. —, aged thirty-two, American, married, mother of one child eight years old. Melancholy for nine months before admis-

sion ; died six months later, fifteen from the beginning of insanity. No autopsy.

This case was characterized by extreme melancholy and strong suicidal impulses always active ; generally silent with most agonized, despairing expression, but had periods when she would utter piercing screams and throw herself about the floor for hours ; often fed with tube because she refused food. There were several slight convulsive seizures just before death.

CASE XV. —, aged fifty, American, widow ; no family history of insanity. Something more than a year before admission to the hospital became the subject of restless melancholia, followed by a gradual failure of intellect. On admission, bewildered and frightened air ; comprehension feeble ; spoke few words in disjointed, childish manner ; appetite inordinate ; habits unclean ; destructive of clothing and other property ; resistive to a marked degree, the most ordinary measures for her comfort requiring four to six nurses. Urine contained albumin (small amount), hyaline and fatty casts. This patient lived a year in the condition described above, more than two years from the beginning of the attack. No autopsy.

CASE XVI. —, aged fifty, Irish, single ; had been complaining of minor ailments for two years. Six weeks before admission became suddenly melancholy, with active delusions of persecution ; suicidal ; refused food and lost flesh rapidly. Died in the eighth month. Became very much emaciated ; frequent abscesses followed superficial injuries ; during a remission of three months was almost well, quiet, and sensible, but with this exception, was always restless, disorderly, and an exceedingly troublesome patient to care for. Urine contained albumin ; no casts noted. Autopsy : Kidneys contracted, capsules adherent, cortex very thin and containing some cysts ; pelves dilated and injected ; heart valves thickened and atheromatous ; atheroma of cerebral vessels.

CASE XVII. —, aged forty, Irish, single, domestic ; mother insane at menopause ; second attack (first attack due to "ill-health," eighteen years before). One year before admission awoke suddenly in the night with the delusion that her room-mate was going to kill her. Lived seven months (nineteen from the beginning), always in a condition of exaggerated fear and apprehension. Gradual physical deterioration with development of tuberculosis. No record of urine. Autopsy : Kidneys contracted, cortex very much thinned ; fatty degeneration of heart, with thickening of valves ; lungs tuberculous, with almost total destruction of the right ; two pints of purulent fluid in the right pleural sac.

CASE XVIII. —, aged thirty-seven, American, married, and mother of five children ; patient said to have been a chronic sufferer from "indigestion, liver and kidney troubles." Mental symptoms of

four months' duration ; a gradual development of melancholia with tendency to stupor. On admission, urine contained hyaline casts with granular epithelium. Mind and body failed together, and she died in four and one-half months, eight and one-half months from the beginning. Pulmonary tuberculosis developed in the later stages. Autopsy : Granular, contracted kidneys ; tuberculosis of lungs ; mitral stenosis of heart.

CASE XIX. —, aged past fifty, married, no children, Irish ; a niece insane. Had been considered fairly well up to about two months before admission, when she began to worry about trifles and developed hallucinations of sight and hearing ; attempted suicide by cutting abdomen with a razor because she was "tired of herself." On admission, the urine contained hyaline casts ; tendency to obesity, with flabby flesh and sluggish circulation ; heart-sounds feeble. This patient seemed more hypochondriacal than truly melancholy ; her attention could generally be diverted and at times she was even cheerful. Her suicidal intentions were not much credited until, one month after her admission to the hospital, she managed to secrete a table-knife and cut her own throat almost "from ear to ear," half severing the trachea, but no important vessels. This was followed by an amelioration of the mental symptoms. The wound kept in healthy condition and had healed to within one and a half inches (small opening into the trachea remained) at the time of her death, which was two months from the time of her admission, four from the beginning of her insanity. She was constantly threatened with heart-failure, and her death, occurring very suddenly, was evidently due to that cause. Autopsy : Kidneys a little swollen in appearance ; capsule not adherent ; cortex thin, friable, and of yellowish color ; containing some cysts ; pelves dilated and injected ; heart flabby and fatty, valves thickened and atheromatous. Liver large and fatty ; right lung contained, in posterior part of lower lobe, a gangrenous area, two by three inches, circumscribed by inflammatory adhesions of the adjacent pleura. Brain not examined.

CASE XX. —, aged seventy-two, American, married ; two brothers committed suicide. Suicidal melancholia of six months' duration ; had a similar attack three years before, from which she apparently recovered. Lived two months, eight from beginning of last attack. No autopsy. Urine contained waxy and granular casts.

CASE XXI. —, aged twenty-four, American, single, domestic ; was "running down" in health for an indefinite time. Melancholia of restless type ; rapid decline with development of tuberculosis. Urine contained a small amount of albumin. Died in four months. Autopsy : Granular, contracted kidneys ; tuberculosis of lungs ; mitral stenosis of heart ; fatty liver.

CASE XXII. —, aged sixty-six, American, widow. Melancholy for one year before admission, and committed suicide by hanging her-

self two months later. Urine contained albumin and hyaline casts. There was a mitral systolic murmur of the heart. No autopsy.

CASE XXIII. —, aged sixty, Pennsylvania German, widow. Whole duration, nine and one-half years. Restless melancholia with keenest apprehensions constantly present. In the early stages would look out of window and scream "The sky is coming down!" "We shall be burned up!" in an agony of fear. Terminated in partial dementia of melancholic type, with extreme emaciation. Autopsy: Kidneys, cortex almost entirely destroyed by fatty change; heart, atheroma and thickening of valves; calculus in gall-bladder.

CASE XXIV. —, aged sixty-five, American, widow, one daughter whose mental capacity seemed below the average. Two weeks before admission arose in the night and tried to set fire to the house. Condition that of restless melancholia of rather quiet type. Lived six and one-half years; without remissions; tendency to dementia slight. Autopsy: Kidneys contracted with extensive destruction of cortex; heart valves thickened; lungs tuberculous.

Third group.—Cases (8) terminating in rapid recovery.

CASE XXV. —, aged thirty-seven, mulatto, married; ten days before expiration of a year's sentence in prison became melancholy, with keen apprehension of personal injury; hallucinations of hearing and of smell; refused food, "having heard them say that it was poisoned to kill her." On admission, urine contained a considerable amount of uric acid and a small amount of albumin; no casts noted. The mental symptoms disappeared in a few days and coincidentally the urine became normal. She was discharged quite well in one month.

CASE XXVI. —, aged forty-four, American, married, mother of seven healthy children. Had suffered from uterine trouble for seven years; internal hemorrhoids also. Simple melancholia developed two months before admission; lost interest in household and family; apprehensions of injury; headache, insomnia, "noises in head," etc. Urine contained hyaline casts and granular epithelium; heart normal. Recovered in six weeks (now two and one-half years ago).

CASE XXVII. —, aged forty-nine, American, single, no insanity in family. Patient lived on a farm, in comfortable circumstances, and was accustomed to eating largely of food that was difficult of digestion; a large woman of full habit; melancholia developed very suddenly; distrusted her own family and jumped from an upper window with the idea of escaping impending danger. On admission (three days after beginning of insanity), mind much confused; incoherent, apprehensive, and especially relative for about one week, after which convalescence was gradually established; discharged well in twenty-one days. (No relapse for three years.) Urine, on the third day, contained

a large amount of uric acid and a few casts; on the eighteenth day it was normal.

CASE XXVIII. —, aged fifty-three, American, wife of a well-to-do farmer; two healthy children; grandfather and father committed suicide; sister and paternal cousin also have been insane. Patient was never strong; subject to palpitation of heart. At seventeen years had an attack of melancholia lasting "a few weeks." Four years ago was again melancholy for ten weeks, ascribed to "general debility." Present attack of three weeks' duration (irritable in her family for a longer period), restless, dissatisfied, and suspicious; suicidal tendencies suspected; physical condition poor; complained of "pains all over." On admission, found weak and anemic; the urine contained much uric acid, a considerable amount of albumin, and a few granular casts. There was a mitral systolic heart murmur. With improvement in her physical condition the mental symptoms disappeared, and she went home in three months quite well in mind; at that time examination of the urine showed a small amount of uric acid, but no albumin or casts. This patient has now been at home seventeen months; while I do not believe it possible for her ever to be well, in a physical sense, immunity from mental symptoms will depend upon the care with which the conditions of her life are regulated.

CASE XXIX. —, aged seventy-one, English, widow with two healthy children; a small delicately built woman. Two previous attacks of melancholia nine years apart. Present attack of four months' duration, appearing to follow erysipelas. On admission restless, apprehensive, suicidal. The urine contained a considerable amount of albumin, with many hyaline, granular, and waxy casts, which gradually diminished, with coincident improvement in the mental symptoms, until she was discharged well in two months from the time of her admission. At that time the urine contained an occasional cast, but no albumin.

In this case, as in the preceding one, the prognosis must be conditional. I cannot doubt in this, as in many similar cases that have come under my care, that the mental manifestations have been coincident with, and closely related to, exacerbations in the course of a slow, interstitial nephritis extending over many years.

CASE XXX. —, aged thirty-five, Pennsylvania German, married; father once insane, but recovered. Insanity, with frenzied excitement, developed two weeks before she was brought to me; had been tied down to prevent her injuring herself; would try to beat her head against the walls and floor, to dig out her eyes, etc. After admission, great restlessness continued for several days; sometimes would utter the most piercing screams for hours at a time; there was general confusion of mind, which gradually disappeared, but depression of spirits, appre-

hensions, etc., with remissions, persisted for a longer time. She went home well in six weeks, eight from the beginning of the attack. The urine, on admission, contained albumin, hyaline and granular casts. (It is much to be regretted that there is no record of the urine at the time of her discharge.)

CASE XXXI. —, aged fifty, American, married, with two healthy children. Rheumatism one year before admission to the hospital; mental depression for two weeks, restlessness, apprehensive delusions, suicidal tendencies, and rapid physical deterioration; complexion markedly sallow; urine contained uric acid and granular casts; heart sounds feeble with a mitral systolic murmur. Under tonic treatment her physical condition improved, the mental symptoms disappeared, and she went home well in two months.

CASE XXXII. —, aged forty-eight, American, single; very marked family tendency to insanity, and patient herself rather below the average mentally. A large healthy built woman. Fifteen days before admission to the hospital began to show mental disturbance with remissions; on the thirteenth day awoke from sleep with piercing screams; the same day had severe pain in the region of the heart, with dyspnea, lasting twenty minutes; micturition was reported as abnormally frequent during the first week, and she had complained of "pain in the back." On admission, face turgid, eyes injected, skin hot to touch; markedly resistive with general confusion of mind. Venesection was followed by immediate relief of the condition described, and on the second day she resembled nothing so much as a good-natured baby who is just learning to talk. She slowly regained her normal condition, and was discharged practically well in about two months. (One year later I have heard that there has been a relapse.) The urine contained uric acid, albumin, and casts, which diminished, but did not (the uric acid excepted) entirely disappear with her restoration to mental health.

Fourth group.—Cases (3) recovering after many months.

CASE XXXIII. —, aged twenty-eight, American, wife of traveling salesman, with two healthy children; of healthy family. For the preceding year had complained of a "heavy pressure across the middle of the abdomen;" mentally deranged for seven weeks before admission, during which she was at first restless, with keen apprehensions of injury, followed by quiet with tendency to stupor. In the hospital was a typical case of "melancholia with stupor," showing little change for eight months, after which she gradually recovered. She went home in the tenth month; at that time her mind was slightly dull and worked slowly, but she has since been reported as entirely well (now nearly three years). The urine contained albumin, blood corpuscles, hyaline, epithelial and granular casts, during the first month, diminishing during the second, and disappearing entirely after the third month.

CASE XXXV. —, aged thirty-three, Irish, single, domestic; in America over three years. For two years had been "running down" in health, with no very pronounced symptoms. Melancholy for four weeks before coming to the hospital; often cried loudly, saying "My soul is lost!" "Judgment day is coming!" Had in the time two short periods (three hours) of immobility. Had refused food almost entirely for two weeks. On admission, condition markedly resistive, and continued for about a month a mixture of stupor and obstinacy; often required mechanical feeding; a few times made violent attacks upon some one near, without warning or provocation; at the end of that time passed into a condition wholly passive and stupid; stationary for a year, then began to take some interest in the work of the ward, and gradually recovered from that time. The urine, on admission, contained a considerable amount of albumin, hyaline and granular casts; on discharge, no albumin, but a few hyaline casts. While practically well at the time of her discharge, it is doubtful if her mind had quite its former acuteness, and I look upon her as liable to a relapse.

CASE XXXV. —, aged twenty-five, single, parents Irish and German, worked in a mill; no insanity in family. Two months before admission came home from work sick, "seemed to have taken cold;" nine days later began to have melancholic delusions with increasing restlessness. With us she was tormented with self-condemnatory delusions for several weeks, with constant restlessness and suicidal impulses; then improved slowly, and after six months spent a few weeks at home, only to come back worse than before. At home had attempted suicide by setting fire to her clothing. Her mental anguish was now indescribable; for weeks she would walk the floor, wringing her hands, crying aloud and accusing herself; she was always in motion, picking at or tearing her clothing, scraping plaster from the walls, etc., if not constantly watched, not from mischievous propensities, but because she "could not keep still." This was two years ago. Six months ago she went home, and has engaged in business as a dressmaker. For a year before she was almost well, but seemed afraid to go home. The early records of the urine in this case I cannot rely upon; a year ago a few granular casts and a trace of albumin were found. Early in the case there were several attacks of apparent heart failure, and at her best she was subject to pain about the heart for days at a time; at times she had also pain in the left kidney. Pallor was always a noticeable feature; there was a mitral systolic murmur of the heart with accentuated second sound.

Fifth Group. — Cases (4) improved and nearly stationary for years.

CASE XXXVI. —, aged fifty-two, American, single, teacher, good family history. Insane fourteen years before she came under my

care ; for the first two years of that time described as being "in a condition of great excitement," during which she made two attempts at suicide ; improved and lived at home some years with mind somewhat weakened. A few months before admission became more restless ; would leave her home and walk long distances with the idea of getting a position ; untidy in personal habits. On admission, December, 1884, walked up and down crying ; fretful, dissatisfied expression ; attention fixed with difficulty ; complexion very sallow. For the past four years has been much improved ; has gained flesh, reads and otherwise employs herself ; has the freedom of the grounds ; expression of face anxious and dissatisfied at times ; capacity for continuous application impaired. The urine contains a varying amount of albumin with granular casts. There is a mitral systolic heart murmur.

CASE XXXVII. —, aged forty-two, American, widow, with two healthy children. History of "pain in back" and headache for three years before admission, during which a natural disposition to worry had been greatly exaggerated, passing at length into delusions of persecution with apprehensions of injury. For about a year after she came to us she continued much depressed, but for the past six years has been much improved ; is rather "difficult" to get along with, and is apt to mistrust and misjudge others, but is able to live at home and works industriously. The urine, a year ago, contained a large amount of albumin and granular casts.

CASE XXXVIII. —, aged sixty, Irish, widow ; a former attack three years before ; insane one week before admission. On admission restless to extreme degree ; would throw herself about the floor and scream for hours at a time ; fed with tube for weeks. Improved after six months, and for the past two and a half years has been almost stationary ; memory and other mental faculties practically unimpaired, but she is inclined to worry without cause, and her temper is irritable and uneven ; insomnia is a marked feature. On admission the urine contained albumin, hyaline and granular casts ; at the present time (May, 1889.) considerable granular debris, but no albumin or casts.

CASE XXXIX. —, aged forty-five, German, wife of a tailor, with two healthy children ; no insanity in family. Eight months before admission had malaria, and about the same time became melancholy with self-condemnatory delusions and strong suicidal impulses. This patient was for many months one of our most miserably restless cases of melancholia and one of the most persistently suicidal cases I have ever seen. In the earlier stages she often made fierce attacks upon others, with the idea of being hanged if she killed some one. For about past three years now she has been quiet, helpful, and extremely kind to all about her, but she is always under observation as a suicidal patient, because, at times, the impulse comes back to her with over-

mastering strength. I have no reliable record of the urine at the time of her admission ; at the present time (1889) it contains albumin and casts.

Sixth Group.—Cases (3) running a very slow downward course.

CASE XL. —, aged thirty-one, widow, American, of good family but married below her station and lived an irregular life for years ; became implicated, with her husband, in some breach of law, and was sent to prison, where melancholia developed, said to be a second attack. On admission, (October, 1887,) expression of face that of abject despair ; delusions self-condemnatory ; "God has cursed me!" the only words she spoke. Intensely suicidal ; at times homicidal (with the idea of subjecting herself to the death penalty if she could kill another). In the following Summer she was, for about a month, in a condition of semi-stupor, with restlessness and delusions that she was grossly maltreated, but for the remainder of the time she has been in the condition of despairing melancholy described above, with strong suicidal propensities always present ; she is subject to pain in the lumbar region and insomnia is a prominent feature of her case. The urine in this case has always contained casts, hyaline, granular, and sometimes waxy, with albumin in varying amount.

CASE XLI. —, aged sixty-five, Irish, single, now in hospital nearly three years. Had been generally healthy, but had an "attack of diarrhea" three months before coming to the hospital, which left her weak ; two months later began to lose interest in her work ; wanted to wander away from home and mistrusted her friends ; finally did not eat, sleep, or change her clothing. On admission, she was in a restless, almost frenzied, condition, resisting everything ; in a month passed into a passive condition, in which she has remained, almost without change, to the present time. She is kept in bed, eats well when food is taken to her, submits passively to necessary care, but does not show any interest in anything about her, although her eyes are open and not devoid of intelligence. On admission the urine contained a few casts ; one examination, in 1889, showed albumin and an extraordinary number of casts.

CASE XLII. —, aged fifty-six, of German extraction, wife of mechanic, mother of seven children ; one paternal cousin insane. Health broken down by "liver trouble" for the previous two years, during the last six months of which she was insane, with delusions of persecution and apprehensions of injury ; suspicious of her best friends, and made an attack upon her husband just before coming to the hospital. At times had periods of greater restlessness, when she would make efforts to escape from her supposed enemies. In the hospital (now eighteen months) she has generally been quiet ; face invariably expresses suspicion and misery ; at times "voices tell her to hang herself ;" occa-

sionally restless and makes efforts to escape; complexion extremely sallow; for the past year slowly losing flesh. On admission the urine contained albumin and waxy casts, confirmed by subsequent examinations.

Seventh group.—Cases (2) illustrating a transformation of melancholia into secondary paranoia with delusions of personal grandeur.

CASE XLIII. —, aged forty-three, of healthy family, American, single. Admitted to the hospital January, 1887, in a condition of melancholia of four years' duration, for the last nineteen months of which she had been in a private hospital for the insane. For the first nine months her whole attitude was that of the most profound dejection; for days she would sit with bowed head, refusing to speak, often to eat; then there would be an interval of a few days, when she would hold up her head, knit, and answer in monosyllables, if spoken to, but never smile and shunning observation. After nine months, (five and one-half years, it will be remembered, from the beginning of her insanity,) there was a sudden change and she became as exalted and active as she had previously been depressed and quiet, and her condition has remained practically unchanged for three years. A stranger meeting her might think her merely over-vivacious, with an incessant activity that is almost fatiguing to witness. She is not over ready to speak of her delusions, but if led to it depends her fixed belief that she is "the Queen of Heaven and will never die." She is always usefully employed and very helpful to all about her; she seems never tired. On admission the urine contained albumin (microscopic record not satisfactory). At subsequent examinations there has been a varying amount of albumin with hyaline and granular casts.

CASE XLIV. —, aged thirty-eight, American, single, of good family, and always lived in comfort; never very strong; indulged from childhood, and not considered mentally equal to the rest of her family. Admitted to the hospital in September, 1884. "A few years" before had "chills and fever," which left her with pain in the back, apparently increasing in severity. Mentally deranged, with apprehensions of injury and hallucinations for two months before coming to me, for the last three weeks of which she was sick in bed. After admission to the hospital, she was weak and more or less in bed for several weeks, during which she had often fits of loud screaming; often fed with tube; delusions that "men came into her room at night to kill her;" that her "bed was filled with worms," etc. Gradual development of delusions of personal grandeur, that she is "Queen of the United States," "head attendant of the ward," etc. Otherwise mental action fairly good, and she is noted for her cheerfulness and activity. Her condition has been pretty uniform for the past three years. I have no satisfactory record

of the urine at the time of admission. One examination, a year ago, showed a large amount of albumin, with granular casts. At the present time there is a trace only of albumin, with many granular casts. There is a mitral systolic murmur of the heart ; complexion a pale sallow.

(I omit two cases marked by extraordinarily varied hallucinations, with delusions of persecution, and one of stuporous melancholia merging into dementia, distinguished in the early stages by cataleptoidal tendencies.)

Eighth group.— Cases (4) of puerperal origin.

CASE XLV. —, aged thirty-eight, American, married, and mother of three children. With first child, fifteen years before, had eclampsia and was unconscious for a week. Second child still-born ; labor began with convulsions, which continued for four days. During the third pregnancy, five years ago, urine was found loaded with albumin, and convulsions seemed to be averted by a free venesection. Since that time her memory has appeared to be slightly impaired, and she has been subject to fits of depression of spirits. Temper uneven for six months ; melancholia, with delusions, one month. Urine loaded with albumin just previous to admission. (For the foregoing notes I am indebted to Dr. R. B. Ewing, of Chester county.) On admission, (April, 1889,) in condition of pronounced resistive melancholia ; face turgid, skin hot, tongue brown and dry ; refused food and drink and resisted everything with a frightened, staring expression. The condition described was at once relieved by a very free venesection, which reduced the case to one of simple melancholia, in which the mind worked slowly but in natural lines. There was notable improvement for three weeks, then she went downward physically, losing flesh for a few weeks, and finally almost stationary ; her mental state, that of simple depression, for three months, when I advised a change for her. From her home she has written me several letters during the past nine months, which indicate that she has almost entirely regained her mental tone. She writes that she has a cough, but at the last report she had gained twenty pounds in weight. The urine, except immediately after the bleeding, has, at every examination, large amounts of albumin and granular casts. Heart fairly normal.

CASE XLVI. —, aged thirty-two, of Irish parentage, married. Five years ago the birth of her first child was followed by a transitory attack of simple melancholia. Present attack came on a few days after the birth of her second child. On admission, eighteen months ago, she was in a condition of wild excitement, which I at first put down as a mania, but which more and more assumed the nature of melancholic frenzy with remissions ; before the nature of the case was fully apprehended, she had nearly taken her own life, and she has remained per-

sistently suicidal. She is a most difficult patient to deal with, being an unusual combination of aggressiveness with suicidal proclivities. On admission the urine contained albumin, of which the relative amount has increased, and there are also many granular casts. The heart-sounds have been feeble and irregular.

CASE XLVII. —, aged twenty-five, American, married, three children. Five weeks after the birth of her youngest child, jumped out of a chamber window "to save her baby;" had previously been dejected and had complained of "ice-cold feeling" at the base of the brain and of a peculiar itching of the soles. Was stuporous, but not profoundly so, during her stay with us, and recovery was gradually accomplished in eight months. On admission the urine contained granular casts.

CASE XLVIII. —, aged thirty-two, mulatto, of superior intelligence; mother and two maternal cousins insane. Two months after confinement with her fourth child became melancholy. On admission very restless and markedly resistive, soon passing into a semi-stuporous condition, from which she never recovered. Died in three and one-half years of phthisis pulmonalis. The first examination of the urine, made soon after her admission, showed a few casts; but four subsequent examinations, made at different times, gave negative results. Autopsy: Cortex of kidneys fatty, diminished, in places absent; scrapings under microscope showed casts and fat globules; heart fatty, hypertrophied, and dilated; lungs tuberculous.

Ninth group.—Cases (2, also puerperal,) complicated with chorea.

In regard to the possible relation between chorea and the presence of "uremic" poisons in the blood, it is *à priori* conceivable that a condition which so often produces convulsions might also cause those other irregular incoördinate movements known as chorea. I find suggestive mention in some of the books on nervous diseases. Ross¹ accepts "a causal relation between rheumatism and chorea," and quotes the report of Dr. Mowry, who found "a rheumatic history" in twenty-nine to thirty-two per cent. of his cases of chorea.

Chorea rather frequently follows scarlet fever, a fact which Ross says "may probably be explained by the frequency with which scarlet fever is followed by rheumatism."

Both Ross and H. C. Wood² notice that chorea sometimes occurs during pregnancy and that cardiac murmurs are a frequent accompaniment.

1. Diseases of the Nervous System, Philadelphia, 1895, p. 660.

2. Nervous Diseases and their Diagnosis, Philadelphia, 1897.

Bristowe¹ says "chorea presents remarkable relations with heart disease, rheumatism, and scarlet fever."

CASE XLIX. —, aged twenty-eight, English, married. During her first and only pregnancy, five years ago, began to have fits of mental depression, which have continued to the present time; the attacks appear to be periodic, coincident with the menstrual epoch; at such times says she feels a strong impulse to kill herself. General choreic movements, of moderate intensity, have been constantly present for about two years. There is no visible impairment of the mental faculties, and her general condition is fairly good. The urine contains granular casts and oil globules. There is a mitral systolic heart murmur.

CASE L. —, aged twenty-six, American, married, with two children; domestic relations unhappy. General choreic movements appeared two months after the birth of youngest child, now about two years ago; ten months later began to have delusions concerning her own person — at times, of great wealth, etc. Was at other hospitals for a year, and minute history not obtained. On admission, (October, 1889,) mind very dull; kept in bed; exaggerated choreic movements of all the voluntary muscles. The urine contained granular casts and oil globules; heart action feeble. At the present time, has improved a little physically, and shows rather more intelligence; choreic movements unchanged.

Tenth group. — Cases (3) complicated with epileptiform convulsions — the "epileptiform melancholia" of some authors.

CASE LI. —, aged thirty-seven, American, wife of intemperate and abusive husband; two children. History of melancholia five months before admission; in third month had three epileptiform spasms in one night, followed by slight impairment of mind and melancholic delusions; in the fifth month also had several similar convulsions, followed by transient mental excitement. This patient has now been in the hospital eight years, condition pretty uniform throughout; there is slight mental enfeeblement, with tendency to mental depression; no delusions; she works industriously and has the freedom of the grounds. Complexion sallow and waxy. Reports of the urine in the early stages are wanting; there are now (May, 1889,) casts and albumin in considerable amount.

CASE LII. —, aged eighteen, Irish, single; father once insane through injury and recovered. Patient worked in mill; at fourteen years of age had an attack of malaria, of which weakness was a prominent feature; two years ago had a "bilious attack" and was admitted to our hospital (being then sixteen years of age) with general confusion

1. Diseases of the Nervous System, London, 1888.

of mind, tending to dulness and obstinacy — occasionally restless, unclothing herself. Recovered in three months. (No satisfactory record of urine at that time.) Returned in two years; at second admission urine contained hyaline casts. Quiet, mind slightly dull, with delusions of persecution, not very active. Had one convulsion a few days after admission, lasting two or three minutes, and, later, another, described by the nurse as epileptiform, and of considerable severity. She went home in six months, apparently well. About a year later I heard that there was a relapse, but as she did not come under my care it was probably transient.

CASE LIII. —, aged forty-four, American, married, no children. Subject to headaches and "pain in the back;" for three months before admission, suffered from insomnia, loss of appetite, increasing mental depression, with apprehension of injury and suicidal tendencies. On admission, December, 1889, skin very dark sallow; emaciated; apprehensive, worrying, but mind increasingly dull. One examination of the urine at this time gave negative results. In the sixth week following had an epileptiform convulsion, followed by increased physical prostration. A subsequent examination of the urine showed casts and a large amount of fat. Her condition to the present time (June, 1890,) has been that of progressive mental and physical decline, and marked by no special symptom.

To the preceding I want to add notes of some recent cases that seem to me of special interest. The first two of these will illustrate the sudden invasion of melancholia, often so disastrous.

CASE LIV. —, aged fifty-five, American, widow, mother of two robust children; no insanity in family; father died of cancer, brother and sister of phthisis. Patient had pneumonia twice, the last attack two years before date, following which her health was less good; she had periods of insomnia, and was more than formerly inclined to fret and worry. Twenty-three days before I saw her she had come to Philadelphia from her home in New York on a visit; at that time was under no medical supervision, but seemed to be in a condition of premature decay. Twelve days before I saw her she asked for a hammer "to fix her trunk," and went up to her bedroom, where she was found a few minutes later violently pounding her head with the hammer; she had made a large open wound of the scalp in the top of her head, and had bruised her face and temples. On admission to the hospital, we found her in a condition of general debility. Heart action very weak, sometimes irregular, with mitral systolic murmur. The urine contained many fine granular casts and fat-globules. She was at times very restless; often had self-condemnatory delusions; sometimes believed herself "possessed of the devil;" complained much of pain and crawling

sensations in the top of the head. She remained with us only two weeks, and died at her home a few weeks later, her downward course marked by no special feature.

CASE LV. —, aged thirty-nine, of German parentage, married, but deserted by husband; two children, youngest six months old. Had been considered ordinarily healthy; subject to rather frequent headaches, mostly frontal, for some years. One week before I saw her, on a rainy day, she had been out, and came in quite agitated, saying "Some one had given her poisoned candy;" soon became much excited and said there "were men in the room after her with pistols!" and jumped out of the window (first floor) to save herself. She was brought back and quieted, but during the following night jumped out of a chamber window, under the delusion that some one "was after her to kill her," fortunately sustaining no more severe injury than a sprained ankle. She was taken to a hospital the following day, and came to us at the end of the week. On admission, anemic, expression of exaggerated apprehension and fear, delusions of persecution and self-condemnation; extraordinary hallucinations of hearing — as the discharge of loud guns near her head, etc. Urine contained granular casts. Improved very rapidly in body and mind, and in three weeks appeared to be well. I was considering the advisability of discharging her, when she relapsed into a condition of acute mania, which has continued now two months; her physical condition is fairly good, and I regard the prognosis as favorable.

CASE LVI. —, aged twenty-five, American, single; mother of feeble intellect and one brother now insane. Patient had been overtaxed in body and mind, when she was attacked by the epidemic influenza in the beginning of the present year, with considerable catarrhal lung trouble; she had no proper care, and was harassed by her insane brother, then at home. Three days before admission to the hospital she became suddenly and violently insane. On admission her mental excitement was very great, and in the form of mania, but it soon became intermittent and took the form of persecutory delusions. The urine contained granular casts at that time; a little later, while passing through an attack of erysipelas of the face, there were large quantities of albumin, granular and blood casts and blood disks, which diminished coincidentally with abatement of the mental symptoms. Under treatment she recovered rapidly and well. (Two months.) I made one examination of the urine about a month after recovery, and found considerable granular detritus, no albumin or casts.

CASE LVII. —, aged thirty-nine, of Irish parentage, single; general health always considered good up to January, 1890, when she had the epidemic influenza, took no care of herself, has been in poor health since. For a month previous to admission, April 10, 1890, had

delusions that her family wanted to poison her ; insomnia and restlessness prominent features ; tried to get away from home. On admission, urine contained albumin and granular casts. Mental condition as described ; expression despairing ; refused food and at times fed with tube. At present (June) is improving.

CASE LVIII. —, aged forty, Pennsylvania German, single, domestic ; general health has been considered good ; not as well as usual for two weeks, but kept at work until three days before admission, (May 31, 1890,) when she jumped out of her chamber window to escape imagined dangers. On admission, mind confused, with tendency to stupor, for a few days ; then a short lucid interval, followed by a condition characterized by suspicion and obstinacy. The urine contains granular and epithelial casts. Her general condition is improving and she will probably recover.

CASE LIX. —, aged thirty, American, married, mother of four children, of which the youngest is four and one-half months old. Subject to frequent "sick headaches" for years ; said to have heart trouble and suffers from hemorrhoids. About six weeks after the birth of her last child was taken with the epidemic influenza ; "severe pain running up the back and stopping in the top of the head," the most prominent feature of the attack, from which she never got up well. Melancholia, with delusions, showed itself almost immediately ; said that there was "an evil spirit following her and controlling her actions ;" accused herself of having "murdered" her child, etc. ; insomnia, loss of appetite, periods of great restlessness and rapid physical prostration. Once escaped from her family during the night. General condition since admission (May 26, 1890,) very poor ; anemic. Urine contains granular casts and fatty epithelium ; heart weak, with loud mitral systolic murmur ; mentally as described above ; prognosis doubtful.

CASE LX. —, aged thirty-two, American, married, mother of two children, youngest nine months old ; a paternal cousin is an epileptic. Had malaria in June, 1888, and has been running down in health ever since ; additionally depressed by a moderate attack of the influenza, in January of this year. Has a slight laceration of the cervix uteri, and was in the woman's hospital for six weeks, leaving there two weeks before admission to the Norristown Hospital. About that time began to awaken suddenly from sleep, in the night, in a sort of terror ; once tried to get out of the window in her fear. Every night would say: "This is my last night to live!" The urine contains granular casts and much granular epithelium ; there is a loud mitral systolic heart murmur ; complexion very sallow ; general condition poor. Now in hospital two weeks ; quiet, with self-condemnatory delusions. For the past two months said to have complained much of "creeping sensations in the back of the head and neck ; "pain in the back" has also been a common symptom for two years.

KRAUROSIS VULVÆ.

By CHARLES N. SMITH, M. D., Toledo, Ohio.

UNDER the name of "Serpiginous Vascular Degeneration," Mr. Lawson Tait,¹ in 1877, described a diseased condition of the nymphæ, which was essentially a progressive atrophy of these parts, attended with the appearance of exquisitely sensitive areas of a brick-red to purplish color upon mucous membrane. These sensitive areas had a tendency to disappear after a time and appear in another situation, or extend in a serpiginous manner. This extension generally continued until the whole inner surface of the labia minora and the vestibule had been traveled over. These spots were so sensitive to pressure that intercourse could not, as a general thing, be tolerated. The disease was one of long duration; little amenable to treatment; recovery generally spontaneous; and resulting in atrophy of the nymphæ and narrowing of the vaginal opening.

This condition generally occurred, as observed by Mr. Tait, at or after the climacteric, although he reports one case in a girl of seventeen years.

In his recent work, Mr. Tait says²:

The nymphæ are also subject to a peculiar and atrophic change, which occurs generally at or after the climacteric period. It is a very distressing complaint, and one of the most intractable with which we ever have to deal. It is very often, but by no means always, associated with vascular caruncle of the urethra. . . . This affection has been alluded to by Simpson and various other authors, but no description which I have seen includes all the facts that may be observed in connection with it. It is always confined, in my experience, to the mucous membrane on the inner surface of the nymphæ, and is never met with on the labia majora or in the vagina higher than the vestibule.

From other cases, which I shall refer to later in this article, it will be seen that the disease does extend to the labia majora, although not observed there by Mr. Tait.

As to the course and final termination of this disease, Mr. Tait further says³:

It is, in fact, a progressive atrophy of the mucous membrane, the last textures affected being the blood vessels and nerves; for when the process has been completed, the pain ceases, the redness disappears, and

1. Diseases of Women, 1877, page 43.

2. Diseases of Women and Abdominal Surgery, 1880, page 51, *et seq.*

3. Op. cit., page 53.

nothing remains but a vestibulum vagina, so narrow that incredulity may be excused when the patient states that she has borne children.

The treatment recommended by Mr. Tait is the application of strong carbolic acid to the red spots, and the insertion between the labia, at bed-time, of a tampon wet with a saturated solution of neutral acetate of lead in glycerine.

Edis¹ describes this disease, but throws no new light upon it. In fact, his article is merely a description of the disease as observed by Tait. Matthew D. Mann describes the disease as seen by Tait, and says²:

I have never met with any cases of this disease, and am unacquainted with any reference to it in American medical literature.

Skene has undoubtedly met with the disease in its last or atrophic form, as in speaking of pruritus vulva he says³:

In the majority of cases of this kind that have come under my observation, the skin has been bleached, in spots appearing whiter than the normal skin. It has also the normal elasticity. To the touch it seems harder and less flexible, but what these changes are, and whether they are related to the pruritus, are questions which have not been yet answered.

In 1885, Breisky,⁴ of Prague, published an account of twelve cases of this peculiar disease which had come under his observation. He gave it the name of "Kraurosis Vulvæ," or shrinking of the vulva. Most of the cases observed by Breisky were evidently in the last stage of the disease, as he makes no mention of the presence of the red spots except in one case.

In a recent paper,⁵ Dr. H. H. Ohmann-Dumesnil reports thirty-five cases which he has collected from various sources, including three cases observed by himself. Breisky's cases are included, but no reference is made to those seen by Tait. Robert F. Weir first described a case of this disease in March, 1885.⁶ In these thirty-five cases the presence of thickened areas or plaques of various colors, red, gray, milky, pearly or opaline, is mentioned as occurring in nearly all. Atrophy of some part or parts of the vulva was present in all. In some of them the labia majora were affected, which is contrary to the observations of Tait. Pruritus, a condition not mentioned by Tait, was present in fifteen, and ranged in

¹ *Transactions of Gynecology*, 1881, page 366 et seq.

² *Transactions of the Gynecology*, Vol. I, page 366 et seq.

³ *Transactions of Gynecology*, 1886, page 36, et seq.

⁴ *Centralblatt für Gynäkologie*, June 6, 1885.

⁵ *See p. 100, Medical and Surgical Journal*, March, 1886.

⁶ *New York Medical Journal*, March, 1885.

severity from moderate to intense. Of the thirty-five cases, four had suffered from syphilis. Gonorrhea had occurred in two. Leucorrhea, a condition present in all of Tait's cases, is mentioned as being present in eleven cases.

Treatment was generally successful in those cases which were seen in the earlier stages, but was unsuccessful in the atrophic stage. The treatment consisted in curetting the spots, and in the application of liquor ferri sesquichloridi, lotions of salicylic acid, pyrogallie acid and acetic acid.

As to the frequency of the disease, Ohmann-Dumesnil says :

The fact that there have been but few cases of this character reported, does not argue that it is a rare condition by any means. In fact, I am inclined to the belief that it is rather frequent, and that it is simply owing to inattention that more of a similar character have not been reported. It is only lately that any considerable degree of attention has been drawn to this disease in medical journals, and all the literature given so far has consisted of short abstracts of the articles quoted in this paper, and of Dr. Heitzmann's cases. When the condition becomes better known, the number of cases will, no doubt, multiply, and what is now looked upon as an unusual disease, will be frequently seen and noted.

I now add one more case to those already reported :

Mrs. A., aged fifty-two, married, and the mother of two children, the younger aged sixteen, consulted me in April, 1888. She was of a marked nervous temperament, slight and delicate figure, but apparently in good health. She had never had syphilis nor gonorrhea. Six years before, and four years prior to the cessation of menstruation, she first noticed a pruritus vulva, attended with pain and scalding upon urination. The pruritus gradually increased for about one year, when she consulted a physician, who found and removed a urethral caruncle. Following the operation there was relief from the pain and scalding upon urination, but no abatement of the pruritus. On consulting a second physician, several months later, she was told that her trouble was undoubtedly the result of diabetes. She was therapeutically and dietetically treated for diabetes for nearly a year, and was given carbolyzed washes and various ointments for the vulva. The carbolyzed washes somewhat relieved the pruritus, although it was always present in some degree. This physician made no local examination and never examined the urine for sugar, although he was positive in his diagnosis of diabetes.

I carefully examined several specimens of her urine, obtained at different times, and found no trace of sugar.

On examination of the vulva a most peculiar condition was found. The hairs on the parts were few, harsh and gray. The vulva was slightly gaping. The labia majora were shrunken, inelastic and composed almost entirely of integument, the subcutaneous tissue having nearly disappeared. A little over one-half of the lower or posterior portions of the labia minora were atrophied, while the upper portions were natural in size and appearance, except for the purple spots mentioned below. The vaginal opening was so narrowed that only the small, virgin size of Sims' speculum could be inserted. About one-fourth of an inch below the meatus urinarius was an exquisitely sensitive patch of dark purple color, a little over one-fourth of an inch in width, and extending downward and to the right for about one-half of an inch. Another similar spot, but smaller, was found on the inner or vaginal surface of the upper portion of the left labium minus. Small and exceedingly thin membranous tags were all that remained of the hymen. The clitoris was normal. The integument of the lower portion of the labia minora and on the inner surface of the labia majora was dry, smooth, shining, and bluish-white in color, with here and there a few small thickened spots of a milky-white color. The spots, and the atrophied areas generally, were not so sensitive to pressure as were the red spots. In fact, the kraurotic changes seemed to have been nearly completed in the lower portion of the vulva, while they were still progressing in the upper portion.

The uterus measured a plus two inches in depth. A slight thin discharge escaped from the os. Thinking that the pruritus might possibly be caused, or at least aggravated, by the discharge, I inserted into the vagina, or had the patient do so, twice a day, a dry absorbent cotton tampon to collect the discharge and prevent its escape into the vulva. This was continued for two weeks with no result.

Having, by this time, decided that nearly the whole trouble arose from the two purple spots, I applied to them equal parts of tincture of iodine and carbolic acid. This treatment resulted in a considerable diminution of the pruritus, but did not remove the spots. I then applied pure carbolic acid, which caused excruciating pain, but was, in a short time, followed by complete relief of the pruritus. These applications were continued from time to time, until the spots were entirely destroyed, or at least until they disappeared. Following the disappearance of the spots was a considerable, but not total, relief from the pruritus. Gradually the

pruritus grew less and less until it, too, disappeared. In the two years which have elapsed, since the cessation of treatment, there has been no return of the sensitive spots or of the pruritus.

Society Proceedings.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Reported by W. H. BERGTOLD, Secretary.

REGULAR monthly meeting was held in the Parlors of the Hotel Iroquois, on September 2d, at 8.15 P. M., with the president, Dr. A. A. Hubbell, in the chair.

Dr. JOHN M. GOLTRA and M. A. Crockett were proposed for membership.

PUERPERAL FEVER.

BY S. G. DORR, M. D., Buffalo.

There will be no effort made in this paper to run through the etiology, morbid anatomy, or mathematical percentage of the different subjects presented. Of all these things you have a well-founded, general knowledge.

There are but a few questions which I intend to present for your consideration this evening :

1. Is puerperal fever epidemic ?
2. Does puerperal fever depend on a special germ which is pathognomonic ?
3. Is it auto-genetic or self-infectious ?
4. Does infection take place previous to labor ?
5. Treatment.

1. *Is puerperal fever epidemic ?* — The technical word epidemic as applied to disease, has several different meanings attached to it, all of which include the notion of general prevalence among a people or community. Some physicians, as well as writers, make contagion the essence of epidemicity. Etymology does not justify such a conception of the term epidemic. The best writers use the word as signifying wide-spread causes, such as atmospheric, acting at the same moment of time on many individuals, or as something regarding which speculation is vain and is referred to as an epidemic influence. The promiscuous use of the word epidemic in medical

literature and medical talk is to be deplored ; to the mind of the medical student it produces hopeless confusion.

There is plenty of testimony showing a connection between puerperal fever and the zymotic diseases, such as scarlatina, diphtheria, erysipelas, etc., but curiously there is an entire absence of testimony showing puerperal fever to be any more abundant during the prevalence of these diseases than at other times. The season of the year having more influence than any other factor outside of hospital infection, twice as many cases occur in the six months from December to May, as from June to November ; and the smallest number of cases occurring during the year being in the months of September and October. This is not to be accounted for, however, by epidemic influence, but by the more constant contact of septic material during the Winter months. The outside air during cold weather is far more pure, but the inside air, the clothing, the bed and the house are more impure.

That deleterious material may find other channels for entering the system than a wounded surface, is evident. French writers report instances of toxemic conditions developing in young midwives during puerperal fever epidemics. When reading such reports I cannot feel safe in following the writer, for I feel he has mistaken frequently a cause for a result.

The point upon which I wish to dwell is that it is possible to trace epidemics of puerperal fever directly to the carrying of puerperal poisons from patient to patient through the media of attendants, instruments, and surroundings.

In theory, if not in practice, the doctrine of contagiousness has ceased to be a subject of dispute, and the epidemic idea is little ventured by the well-informed.

The majority of all medical literature at this time declares this fever to be an infectious disease, due to some form of septic inoculation of the genital tract ; an infection in *point of fact* which might be operative in the *non-puerperal* condition, and which is developed and increased in activity or virulence by the parturient. The hypothesis for this increased activity or virulence is the fact that in the capillary network of the blood-vessels of the uterus a great difference exists between the puerperal and the non-puerperal organ.

In the non-puerperal uterus the blood current moves much more rapidly through the capillary blood-vessels than it does through the distended capillaries of the puerperal uterus.

It has been frequently demonstrated that when the micrococci come in contact with the red blood corpuscles in a state of rest or of but little motion, they — the red blood corpuscles — will stick together, forming thrombi and micrococci, very rapidly increase in numbers, whereas, in a blood current, the opposite condition prevails, (viz.:) no thrombi, no increase of micrococci. I am of those who believe there is no such thing as puerperal fever as a distinct disease, standing independent and alone. I believe it to be really a surgical fever, modified by the particular septic germs in conjunction with the physiological conditions which belong to the puerperal state, such as blood changes induced by pregnancy; the deep situation of puerperal wounds; the presence of clots even in the capillary net-work of the uterus; disintegrating and decomposing tissue; the ease with which lymphatic absorption takes place, the size of the veins already referred to, and the proximity of the peritoneal cavity.

2. *Does it depend on a special germ which is pathognomonic?* — Up to the present time no distinct specific bacterial form has been demonstrated (that I am aware of) peculiar to puerperal fever only, the different, though closely allied bacterium of pyemia, septicemia, gangrene, erysipelas and diphtheria, all having a common connecting link in being generated in putrefying media, seem to have the power of producing puerperal fever. Curiously, enough, the bacterium termo and bacterium commune, to which the putrefaction is largely due, are in themselves harmless, except it may be to produce putrid intoxication. We know clinically that we may have septicemia without pus, and know we may have abundant pus and no septicemia.

It has been demonstrated that the supposed harmless spores found on leaves, fruit, and even in supposed pure air, can by a succession of cultures be brought to flourish in a warm alkaline fluid, and that they acquire a capacity to penetrate living tissues, to proliferate in them, to excite necrosis and to cause death.

Doderlein, Van Ott and Winter, three eminent German bacteriologists, have, independently, examined the lochia of healthy lying-in-women to ascertain the presence of microbes. They all agree in their results (viz.:), that the lochia contained in the uterus are free from germs, while the discharges in the vagina contain abundance of germs of many different kinds. They also examined the secretions of the genital canal in the unimpregnated state with corresponding result (viz.:), the secretions from the tubes and the uterus

were free from microbes, those from the vagina contained germs in great numbers and variety. These results harmonize with our clinical experience. They explain why a retained fetus and secundines in utero do not putrefy, while the same products, if detained in vagina, quickly decompose.

All of you must have been surprised and gratified at times to see that a dead fetus entombed in the uterus for months made no trouble; that when it was expelled it was brown, dry and mummified.

3. *Is it self-infectious?*—Here comes the question of self-infection; (a term which I prefer to auto-genetic). It is a practical point relative to treatment, and must settle the advisability of removing the contents of the uterus or not, and how is best to do it?

If there is no danger of self-infection, then it is best to let them alone. If there is danger of self-infection from the vagina, then vaginal antiseptics best be applied.

The uterine cavity of lying-in-women, where there was febrile symptoms, have been found to contain streptococci, and in women dying from septicemia, not only the uterus but every organ of the body contained them. Self-infection without a cause, I do not believe in, but a self-infection without contact of hands or instruments, I do believe may come from the vagina and other surroundings. I also believe that deleterious material *may* find other channels for entering the system than a wounded surface; but I am in doubt if there be cases of self-infection which result from processes within the patient herself, quite independent of the entry of germs, as is claimed by Dr. Barnes.

4. *Does infection take place previous to labor?*—The question of infection previous to labor is very obscure. It is important to know if it exists, and if such a condition does exist, then it is important to know what the noxious material may be and how it affects the patient.

I hope the members present, in their discussion, will be able to afford much light on the subject. It has been my fortune to have had several cases where a fever existed at the time or immediately subsequent to labor. I have no record of them only in memory. These cases have been frequently difficult, chronic and dangerous; more so, I think, than those where the infection occurred subsequent to labor.

It will be easily apprehended that it may arise in any period of pregnancy or of the puerperal state. It seems to me to be a metritis or a parametritis, more than a phlebitis in the beginning;

although these cases may result in a subsequent phlegmasia alba-dolens, they, in my experience, more frequently result, however, in abscesses or peritonitis. We not frequently see the original inflammatory action of the womb and its immediate surroundings disappear, while the more remote parts of the body may be suffering acutely.

My experience has led me to believe that a septic infection does take place previous to labor, and that it is a very different disease from that which occurs subsequent to labor. It is more chronic in all of its characteristics and more likely to form abscesses.

5. *Treatment.*—The present unanimity of treatment of this disease is curious. Most articles on the subject seem to wind up with curetting the uterus and bichloride irrigations. This monotony of treatment is broken, however, by differences of opinion relative to the percentage of the bichloride.

The young man must feel as though he had not discharged his duty to his patient, unless he has scraped the uterine cavity and irrigated the same with bichloride. I do not criticise the curetting of the uterus when it is necessary, but I do not think it is so very often necessary, and that frequently it is harmful rather than advantageous.

In regard to bichloride of mercury irrigations, I must say, I have been unfortunate in not having seen any remarkable good results from their use. I do not criticise the cleansing of the uterine cavity, but I think we have a better agent in iodine.

Iodine may not be the most powerful germicide, but its wide range of curative powers, in removing inflammations, healing sores and alterative action, makes it the better agent.

Bichloride of mercury is undoubtedly a good antiseptic for hands and instruments; they will be less colored by it than by iodine, — then again, the hands and instruments differ widely from the diseased parts of the patient.

Pepper, in 1886, recommended the introducing of iodoform suppositories into the uterine cavity, which treatment I have tried with varying success. Sometimes the patient did better when the treatment was stopped; in fact, I have felt at times that the recovery of the patient was due to its suspension. That which has given me the most satisfaction for several years, has been the simple vaginal wash of compound tincture of iodine, one drachm to the pint of warm water — irrigation repeated every six to eight hours. Upon this simple wash I have relied successfully in those

very bad cases of the disease which frequently appear in that locality where my lot is cast.

Treatment is determined in great measure by the tissue system which is predominately affected. There may be inflammation of the mucous membrane of the genitals only, or there may be inflammation of the uterine parenchyma, or inflammation of the peritoneum, covering the uterus and contiguous parts, or a phlebitis with pyemia or a septicemia, or an absorption of ptomaines with toxic affects,—all these conditions are to be met with good judgment.

The fear of carrying the disease from patient to patient is great, but I now think quite unnecessary. When we feel that we are not common carriers in this respect, we are more brave. When we can show that the dirt, dust, filth, blood, heat, etc., will produce the disease, when taken in connection with the bacterium of every unwashed vagina, then you cannot fear to point out the true cause of the trouble to the patient and friends. So far as preventive medicine is concerned, I am convinced that antiseptic vaginal irrigations are sufficient.

STRANGULATED HERNIA.

By DR. W. S. TREMAINE, Buffalo, N. Y.

(Abstract.)

Dr. TREMAINE said that he was well aware that he had not chosen a very new subject, but he also knew that it was not worn so thread-bare but that it might afford material for some practical points for the general practitioner. Twenty or thirty years ago our teachers said that in cases of strangulated hernia, we were to continue our efforts at reduction for a long time, and avoid, if possible, an operation. There remains with the older men, more or less, of the traces of this early teaching, and he has occasion as a consultant to meet with it now and then. The first point of his remarks was directed to the absolute necessity of early operation in cases of strangulation, if gentle taxis failed to reduce. No case of strangulated hernia will die from an operation, if in proper hands; but will surely die if let alone, and especially if too great and vigorous efforts at reduction are used. Every man who practises when he is not within easy reach of a competent surgeon, should know how to operate for strangulated hernia. A practitioner on encountering a case of strangulated hernia, should either send at once for a consultant, or explain the risks of an operation and the necessity for one. Then, if under chloroform a reduction with slight and

exceedingly gentle taxis cannot be secured, the hernia is to be attacked, the sac opened, and the constriction found and released. He related a case where, from the severe and prolonged efforts at taxis, he found the gut black, and he hesitated whether to return it to the peritoneal cavity, or make an artificial anus. He remembered Sir Astley Cooper's axiom: "That the belly is the best place for a gangrenous gut," and slipped it back. The case made a good recovery. Dr. Tremaine's second point was in relation to the so-called "radical cures of hernia," which he believes ought to be termed "attempted radical cures." We are as yet a long way from being at the bottom of this matter. There is at present a sort of rage for operating on cases of hernia, mostly because of the simplicity of the operation, and the comparatively small risks. In cases with small sacs, little gut, or perhaps mostly omentum, he would not operate. There is now a current setting in the other direction, and a re-action against this promiscuous operating is taking place. He mentioned a case where it was exceedingly difficult to isolate the sac, the hernia was omental, and had probably never been entirely reduced; he found the cord, the testicle, the omentum, and the sac, one intricate, tangled mass, and was compelled to remove the whole. It was a question of moment, in this case, whether he ought to have removed testicle without the patient's consent; all of the attending circumstances certainly justified his decision to do so. There is no fixed point at present from which we can decide whether we ought to attempt a radical cure or not. Dr. Tremaine believes that, if the patient be a person who works by his brain, and not by arduous labor, and whose rupture is easily retained by a simple truss, that such a case should be left unoperated. If, however, the patient be one who does great muscular labor, and who cannot maintain his hernia within the abdomen easily by a truss, then in such a case we should attempt a radical cure. In cases of strangulation, and irreducible cases, it is a question yet unsettled, whether, when operating for relief, we should attempt to get a radical cure also. In these last cases deaths do occur, and we cannot always say from what cause, either.

The patient's life is always to be the first consideration, and whatever arises, the consultant's judgment ought to prevail.

DISCUSSION.

Dr. M. D. MANN thinks that Dr. Dorr's views are, in the main, accepted by nearly every one. Germs, from a case of puerperal

fever, are more virulent than similar germs from another soil, as, for example, the normal vagina.

It is not necessary that a man should give up all obstetric work, because he has a puerperal fever case arise in his practice ; he must, of course, exercise every precaution possible. He has frequently gone directly from such a case to a laparotomy without doing harm. Of course, it is understood that he changed his clothes, took a thorough bath, and bathed the hands and beard with an antiseptic solution before meeting the operative patient.

Dr. FREDERICK said that there was not much left for discussion, as Dr. Dorr's paper had covered the ground very thoroughly in a manner acceptable to nearly all. He believed that the essayist had not laid stress enough on the efficacy, in proper cases, of intra-uterine douches.

Vaginal douching is enough if the lesions are in the vagina or about the cervix, but they will fail utterly to do good if the trouble be in the uterus proper.

Dr. F. W. BARTLETT said that he had lost very few cases of a puerperal nature, and it seemed to him that those which he did lose died after having used intrauterine douches. One case had a chill directly after the exhibition of an intrauterine douche, and died directly after the second douche was given. In another case the patient died twelve hours after the second douche was used. In some cases of pre-puerperal fever it has seemed to him as though there was a typhoid condition present. In all events, we ought always to be thoroughly antiseptic. He often uses a finger-cot in making examinations.

Dr. WYCKOFF thinks that we are nearly all agreed as to the nature of puerperal fever, but believes that intrauterine douches may be very dangerous.

Dr. INGRAHAM said that he believes most thoroughly in the use of the curette, and intrauterine douche when necessary. He has never seen any trouble arise from their use.

Dr. PERSONS thought that Dr. Dorr's ideas had a tendency to combat the theories now taught in the schools. The first thing to do in a case of puerperal trouble is to locate the cause, and then treat it. He uses a speculum for this purpose, and he now has much less difficulty than formerly in locating the offending lesion. If it be in the vagina, or about the cervix, vaginal douches are enough, but if in the uterus, uterine douches are positively indicated.

Dr. COAKLEY said that in thirty years' practice he has never had a well-marked case of puerperal fever. He has always been exceedingly careful, and has practiced scrupulous cleanliness. He uses turpentine as a hand-wash before making vaginal examinations.

Dr. DORR said that he was sorry that the discussion had not been more on those obscure cases of pre-puerperal fever, and he hoped that those present would give their experience with such cases.

Dr. MANN recalls, in particular, two cases of dead fetus where there was fever previous to the labor; here it was easy to explain the fever. In other cases he has seen fever before parturition, and in many could not explain it at all.

Dr. PHELPS agrees entirely with Dr. Tremaine as to the necessity of having every practitioner know how to operate for strangulated hernia. Operations for hernia are a bugbear to nearly every student and practitioner. The late Dr. J. F. Miner said that a hernia really had but two coverings: The skin and the sac, instead of seven as given in the text-books; we ought to, therefore, cut down, carefully of course, but boldly, until the gut is reached, and then liberate it. Antisepsis in these operations is of the utmost importance and should be exercised in every necessary detail. He does not believe in taxis, except of the gentlest kind, and continued but a short time. He believes that omentum which has been squeezed for a long time by efforts at reduction ought to be cut off, etc. Dr. Phelps also believes that we ought to try to get a radical cure in operations undertaken for the relief of strangulated cases. In old people and large hernias we ought, however, to simply try for relief, and not for radical cure. Children and young people bear it well. We can't say why one case is cured, and a second not. The death-rate is very small. He does not recommend operative procedures in children before seven years old.

Dr. BARTLETT asked about the injection methods of cure for hernia. In trusses for infants with congenital umbilical hernia, he believes that the hemispherical button thereon is more apt to keep the breech open by pressure than to lead to its closure.

Dr. TREMAINE said that he believes the mortality in operations in non-strangulated cases of hernia is about three per cent. In cases where the rupture is small, and easily held in place by a truss, he always hesitates to operate. He does not mean to decry the efforts to cure hernia by operation, but he wishes to impress the

need for caution in entering upon an operation. He mentioned a case in a sailor, where he had used chromated cat-gut to unite the pillars of the ring, and after five years there was no return. This is his only case where he thinks he is justified in saying that a radical cure was obtained. The injection method has been tried and found wanting. He spoke of the use of electricity, now practiced by a notorious quack of Buffalo, for the cure of hernia; he thinks that it acts by exciting adhesive changes about the ring, and he mentioned a case where he had to operate for strangulation: The patient had been pronounced cured, after treatment by this quack, and a few days afterwards was taken with symptoms of strangulation. On opening the sac he found that the stoppage had been incomplete; that the gut was patulous above and below, but that it was firmly bound to the ring by fibrous adhesions, which had partly constricted the lumen of the gut; the constricted portion itself was gangrenous.

Under voluntary communications, Dr. Ingraham spoke of a visit which he had made to the gynecological institute of Dr. Leopold, of Dresden, and described the method of work, etc.

Dr. C. G. STOCKTON spoke of his experience in attendance at some of the medical society meetings in London.

It was announced that Dr. Edward Clark would read a paper on Abscess and Fistula of the Ano-rectal Region at the October meeting.

Progress in Medical Science.

SANITATION.

By JAMES W. PUTNAM, M. D.

FOOD SUPPLY.

THE direct relation of public health to the food supply is one which makes the purity of canned goods a very important one. In the report of William K. Newton, M. D., Dairy Commissioner, of New Jersey, for 1889, we find startling and important facts, which are abstracted in the *Sanitarian* for July. The ground covered was very complete, and in the point of canned foods, thirteen American samples were examined, all of which were found to be in good condition and free from metals or other dangerous ingredients. Of

107 samples of imported canned foods examined, eighty-eight were found to be adulterated or not standard ; the chief adulterant was copper, which was added to give a green color to the vegetables.

Fifty samples of ground coffee showed only ten were pure.

Ground spices, 649 samples were examined, of which 306 were adulterated or not standard.

Honey, 111 samples were examined ; eighty-three adulterated.

Molasses, sixty-four samples showed thirty-eight adulterated. Chief adulterant glucose ; some samples had been bleached by the use of sulphuric acid and some contained tin.

Pickles, ten samples, three were pure, seven contained copper.

Fruits, jellies, jams and preserves, 192 samples were examined, of which thirty-three were pure and 159 adulterated.

The analysis shows that many of the samples were devoid of any of the fruit mentioned on the label.

As an illustration, a sample of "currant jelly" contained starch, water, acetic acid, currant flavoring extract, glucose and coloring matter ; the currant flavoring matter is made from amylic ether.

Of this fraudulent jelly stuff, the *Sanitarian* says : "One Philadelphia firm sold thirty-nine tons in one week ; one other factory delivered 1,000 tons in six months. There are about fifty of these factories in the United States, so that one can see the enormous amount of this fraudulent stuff which is eaten by the poorer class of people.

The following table will show the articles used in the fraudulent jams and jellies. Articles used to give substance : Apple pomace, apple juice, starch, glue, gelatine, Japanese isinglass. Articles used as flavors : Apple inferior or spoiled fruit juices, artificial flavors, and the compound ethers, acetic acid.

Artificial colors used : The aniline dyes — eosine, fuchsine, Bismarck brown, garnet red, ruby red and various carmines.

Among the firms whose names were on the labels were two which we recognize of especial interest to physicians in this State, viz.: The Erie Preserving Company and Empire State Preserving Company.

Bologna sausage : Twelve samples were examined, with the result as follows :

The analysis of the bologna and the skin in which the meat was placed showed that some dye, probably one of the anilines, was used to color the material, in order that some defect might be hidden or the article made to appear better than it really was ; also, that some substance had been applied to the exterior of the sausage

similar to varnish. Further analysis revealed the presence of triamidoazobenzine, or Bismarck brown, one of the aniline colors; this was in the meat. The skin, or "casing," was coated with a varnish containing shellac. This discovery was the means of arriving at all the details of the process employed. The sausage in question was prepared in the following way: After the meat was chopped and the sausage-meat thus prepared put into the casings, the sausage was boiled in a bath containing a portion of the following coloring agent: Bismarck brown, fourteen parts; garnet red, two parts; water, one and one-half pints—this gave the sausage a brown color. When this process was complete, the sausages were coated with a varnish composed of shellac, resin, oil, and alcohol.

In order that the small local manufacturers of sausage might engage in the practice of making dyed sausages, the compositions referred to above were offered for sale through the State, and the staining material was sold under the name of "smokine" or "liquid smoke."

The sale of the article was checked by the official action of the inspectors throughout the State.

THE DANGER LIMIT TO INFECTIOUS DISEASES.—The *American Practitioner*, for July 19th, publishes the following table drawn up by the Society of Public Hygiene, in Paris, for the guidance of the masters of public schools with reference to the time that may be allowed to intervene between the onset of the malady in a pupil, and the date that he may be re-admitted into the school:

MALADY.	PERIOD OF INCUBATION.		PERIOD OF INVASION.	PERIOD OF RE-ADMISSION THAT MAY BE AUTHORIZED.
Scarlet-fever	7	2		Forty days from the first day of invasion.
Measles	9	4		Twenty-five days from the first day of invasion.
Whooping Cough	12	5		Thirty days after disappearance of the characteristic
Diphtheria	5	2		Forty days from the first day of invasion. [cough.
Mumps	18	2		Twenty-five days from the first day of invasion.
Varicella	14	2		Twenty-five days from the first day of invasion.

THERE would appear to be a recurrence of the influenza in Vienna. Several cases are stated to have occurred in the hospitals there. In Paris, also, the disease is said to be reappearing.—*Journal of the American Medical Association*.

Correspondence.

MR. EDITOR: — Your “leaders” to the Apostolatous letter of Dr. Hayd in your August number were very fitting, and a real foreshadowing of what was to come. In fact, when a true follower of the prophet journeys to Mecca, we know beforehand that a new manifesto is to be promulgated, in which Mahomet is deified and the Koran glorified, where faith shines refulgent as a knowledge of things hoped for, an evidence of things unseen.

This is especially applicable to the electrical diagnosis which is charmingly and alluringly exact to the unstudied. In electricity, as in other magic, success is dependent upon its factors, faith, paraphernalia, and plausibility, which stands for honesty; not maintaining, however, that there are no honest electricians. It is noteworthy, nevertheless, that such men, honest because surgically capable of estimating the claims of electricity by reason of experience, are foremost in narrowing its usefulness. Or, to state the proposition more directly: to make good a claim for any remedy, as a specific, which electricity is claimed to be in the diseases of women, it is necessary for those so asserting to know these diseases, their lesions, their diagnosis and treatment, their complications and pathology, to an extent which will justify their claim to be considered authorities concerning them. To illustrate: Dr. Apostoli, when advocating electrolytic galvanic puncture in extra-uterine pregnancy, was asked whether he had ever used it. His answer was “no.” The inference is, then, that if he had never used it he had never seen a case, and if he had never seen a case he was thoroughly incompetent to say what should or should not be the treatment. His opinion may have been very honest, but the expression of it, as an authority, was dishonest. A man may cast counterfeit coin, but he has no right to stamp it as genuine and pass it. Now, we hold such is the position of most electricians; they substitute for experience and knowledge, which would teach them in a majority of cases the impossibility of exact diagnosis to start with, a presumptuous pretense at infallibility in diagnosis. They create the disease, then cure it; or, finding a physiological variation, they juggle with pathological terms until the two are confounded, and the general reader is confused. Such, for instance, is their use of the term “fibroid uterus” as against a fibroid tumor of the uterus. Such, again, is their position as to the frequency

of fibroid tumors necessitating active interference. Says the writer : "One sees a great many fibroids of all sizes and in various locations ; some are extremely large and have been under observation for many years." As a matter of fact, fibroids requiring radical treatment, speaking out of the knowledge afforded by a large clinic, are not numerous. But granting they are numerous, why, if electricity cures them symptomatically, as is claimed, are they kept under observation "for many years ?" "In exceptional cases the tumor has disappeared," is one of the pleasant fables (Credat Judæus Apelles) given out to draw, Louisiana lottery fashion, but will never stand good save for the phantoms of hysteria.

We fear his evident desire to be pleased has led him to undue enthusiasm at a sacrifice of his better judgment, else how were it possible for him to say in all fairness "he (Apostoli) is a brilliant diagnostician ?" Is he not too easily satisfied ? Said the guide : "This is the tomb of Adam, for it has never been proved to the contrary." And here we must insist, for his enlightenment and for the benefit of those who may be misled by his enthusiasm, that absolute or even approximate diagnosis of the conditions likely to be found in relation with uterine fibroids, worthy of the name, is impossible even by those who are accustomed to deal with these tumors visually, hand to hand, or even stage to stage, in operation. The claims made by these men are wild, and would be ridiculous were they not fraught with such a fearful burden of falsehood. If the author of the letter considers such expression extreme, we can afford him opportunity, to his satisfaction, to prove or disprove the fairness of our position practically.

The writer champions Dr. Apostoli ; this is just, but ill-advised. He says : "What his earlier utterances and claims may have been, I know not, but the position which he now takes in reference to electro-therapy, as applied to diseases of women, is not as extravagant as we in America have supposed." The naïvete of all this is charming, but fatal to the former extravagances claimed by him, as expressed in Buffalo in April last, when he followed, defended and extolled the Apostoli treatment, all without knowledge of it, crying like the priests before the sacred shrine, "*procul, procul, este nefandi !*" to those who criticized and discredited the pretentious claims of the man, because from experience and study they had a right so to do.

As to the extent to which Apostoli claims the usefulness of

electricity in diseases of women, we have his sanction in Bigelow's compilation, 1889, to which he stands godfather for the following: Fibroid Tumors of the Uterus, Hypertrophy of the Uterus, Non-Suppurative Salpingitis, Metritis, Endometritis, Subinvolution, Superinvolution, Disorders of Menstruation, Ovarian Pain, Chronic Oöphoritis, Peri-uterine Inflammations, Displacements, Hematocele, Some Hystero-neuroses, Stenosis of the Cervical Canal, Erosions of the Cervix, Nausea of Pregnancy — all of which would justify the writer's exclusive use of electricity in all complaints of women, as expressed in his Buffalo discussion in April last, and show if it is not now in accord with the teachings of his master, that his electrical therapeutics are about as variable as many of the physical manifestations of the subtle force, and no more certain of permanency.

As to the cure of uterine fibroids, he is strangely "conservative" as to the efficacy of electro-puncture. We at first feared another Apostolical dogma had failed of its infallibility! But, now that we know "puncture" means only a *prick*, varying in depth from one-twentieth to one-twelfth of an inch, we are at peace, and must war no more against it as being dangerous, or having the elements of being worthy of serious consideration. He is also sure of "cellulitis." We adjure him, has he ever, to his positive knowledge, or in post-mortem examination, seen a case of simple cellulitis? Will he take the testimony of those who have looked for it and have failed to find it? Will he read the modern pathology, now almost ancient, apropos of Bernutz and Goupil, and alone convince himself that together with his own ignorance of the "earlier" views of his master, and the master's own ignorance or disregard of all that is proven by direct investigation in pelvic disease, that cellulitis, generally speaking, is a myth, and, therefore, that its cure is mythical?

As to the pain in the application of electricity, "They jest at scars who never felt a wound," and it needs only the testimony of women who have felt the pain, to convince all but the electro-maniacs that there is pain, and this even is confessed by them in their rules for the application of the current.

So far as the cure of hemorrhage is concerned, we must, first of all, understand clearly what "cure" means. There is no doubt that the cauterizing, or cooking, effect of the galvanic current is temporarily hemostatic in its effects, but that one, or two, or more applications will permanently cure uterine

hemorrhage, without continual recourse to the current, has not been proven. On the contrary, there are numerous instances in which the hemorrhage has been rendered much worse or uncontrollable after the application of the current. But even here he is self-contradicting, for further on he says: "I have seen cases come to the clinic who bled profusely after an examination. This treatment lasted several minutes with the effect of completely arresting hemorrhage for several days." Altogether there is little to convince, and much to discourage, faith in electrical methods as expounded in his correspondence.

The writer's sublime confidence equals that of the poet who declares of his mistress: "I do believe her, though I know she lies." After all, infatuation is not reason, nor is asseveration argument. More light is needed to clear away the conflicting statements and opinions concerning this gynecological panacea, as held by the electricians, or this most arrant of frauds, as believed by the surgeons.

J. P. and J. H.

COURT RECEPTION AT BERLIN.

BY COMMAND of the Emperor, a Reception and Garden Concert was given at Potsdam, at which Prince Leopold, of Prussia, the Emperor's cousin, received the guests, attended by Count Caprivi, Court Marshal Count Eulenberg, Herr von Gossler, (Minister of Education,) and other high officials. Invitations were issued to 500 guests, selected from many of the leading British delegates and members. At the reception, which took place in the Shell Room, the guests were arranged according to their nationalities, and Prince Leopold, in walking round the circle, caused a number of the representative visitors to be specially presented to him, addressing to each of them a few words of courteous welcome. Subsequently a concert was held in the garden, in the course of which Prince Leopold mixed with the visitors, and conversed with them on subjects likely to interest each. Refreshments were served, and the party returned, being taken back to Berlin by the special train which had brought them. Everything was done to make the medical guests of Germany feel that the German Emperor fully participated in the cordial and generous welcome which had been given to them by the municipality, citizens, and the profession of Berlin, and desired to mark his gracious goodwill to the Congress and its members. Happily, the weather on this as on all the other days of the Congress was peculiarly favorable, and the Court function was in every way an interesting and successful one.—*Journal American Medical Association.*

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No. 3.

Editorial.

THE HOSPITAL SYSTEM OF SWEDEN.

DR. G. BOLLING's report on the state of the hospital system of Sweden, in 1888, published in *Hygiea* for July, gives a comprehensive view of a subject always interesting to the medical profession, and reflects no small credit on the indefatigable and unselfish workers in this branch of science, while it gives evidence of the enlightened care bestowed upon the art of healing by those having in their keeping the welfare and happiness of their country. Omitting from the report before us details consisting mainly of accounts of new institutions, additions to those already existing, cost of building, keeping, etc., matters of purely local interest, we limit our attention to such points as may be of special interest in studying the general progress of medical science.

The Swedish physician, after his severe training and final examination, though not strictly speaking a public official, except he be in the army or navy, and, therefore, free to pursue his profession in the same manner as our own doctors do, seems to be less subject to the caprice of the public as regards his practice, the well-known high standard of his school being taken by the intelligent masses as the guarantee of his qualification.

In cities the practitioner is generally paid as with us, though, in many instances the family physician receives a stipulated sum by the year, whether his services be required or not.

Public hospitals are known as *Lazarettas*, *Sjuk-hus*, i. e., sick houses, or *Kur-hus*, the last, by the way, being wholly devoted to syphilitic patients ; but whatever the original etymological difference

may have been, at present there is none but in name; they may, therefore, be all designated as hospitals.

Some of these institutions are built by, and in part or wholly maintained by private means, but all are under the constituted medical department of the realm, and all are subject to government control, either general or provincial. Another feature in the arrangement for the care of the sick, is the so-called *sjuk-stugor* (sick cottages). These are placed here and there in some of the remoter and more sparsely settled parts of the country, built and maintained at the expense of the Province, thus enabling the provincial physician to give his scattered patients regular hospital care when necessary.

The physician appointed to the care of a hospital, as well as the provincial doctor, whose duty calls him to all within his district free of charge, though he generally receives voluntary fees from those able to pay, is salaried from public funds and is always a man of ripe experience, a man whose ten years or more of university study, subsequent hospital training and foreign travel have eminently fitted him for his duties as a learned exponent of the mysteries of his profession, and earned for him the confidence of the public as a careful and intelligent practitioner. According to Dr. Bolling's report, the number of institutions for the care of the sick, public and private, was, in 1888, about 130; the number of beds in the public hospitals of the Provinces was 4,401, in civil institutions 2,676; thus, in all, during the year, 7,077 places for patients, or one place for about 671 inhabitants of the country. In all, during the year, 31,645 patients in this way received medical attention. The aggregate cost of maintaining these institutions was about \$360,000.

After a tabulated statement of the diseases treated and operations performed, the report closes with a synoptical history of twenty-one remarkable surgical operations, a few of which, of more than ordinary interest, will be found among our translations in a future number of the JOURNAL.

In looking over the present medical literature of the Scandinavian nations, we are struck with the minute attention paid to accuracy of scientific detail and apparent honesty of purpose to state things just as they are, or were, even when error of judgment or unforeseen causes have led to adverse results. Again, we find that capital operations and great results are not confined to the largest cities with their supposed advantages, (true the greater number of

cases are treated in the largest and best appointed hospitals,) but some of the most instructive reports of cases, both medical and surgical, are by resident physicians of remote cities and towns, the population of which, in our country, would not entitle them to the name of villages. Great attention is also paid to organic chemistry and hygiene, the chemistry of food products and their physiological or pathological values; in short, there seems to be no subject connected with the sickness or health of man that is not scientifically and broadly treated in their investigations. When we take into consideration the fact that all the Scandinavian nations together, even including Finland, (now a Russian principality, but Swedish still in feeling and culture,) do not possess a population equal to the combined numbers of New York and Pennsylvania, we must acknowledge that they deserve to rank among the foremost in the advancement of medical science, if in addition to their paucity of numbers we compare their financial resources with the above mentioned States, still greater credit must be awarded their endeavors; one advantage is theirs, however, in their institutions for the advancement of science, they are practically in unison, and factional strifes, mischievous isms and quackeries, which hamper the honest searcher after truth in more populous and advantageously situated countries, do not so readily take root where intelligence is general and where little is to be gained by greedy charlatans. We would not, however, be understood as claiming that quackery and irregular practice is unknown, but in Sweden, at least, they can never have legal sanction, nor do they seem to be countenanced as here by any considerable part of the people.

MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY.

THE Medical Department of Niagara University began its eighth annual course of lectures on the 22d of September, ult. The opening exercises were held in the evening in the new amphitheatre and were largely attended by new and old students, alumni, and friends of the school. The address of the evening was delivered by Dr. Floyd S. Crego, Professor of Nervous Diseases and Insanity.

After extending a hearty welcome to all, the doctor reviewed the success of the school, and spoke in detail of its aims and methods; he also called especial attention to the new law creating a State Board of Medical Examiners, which he said would

receive the hearty support of the school, as it had always advocated whatever advanced the standard of medical education.

The larger part of the address was devoted to the consideration of the advances that had recently been made in medicine, especially in the line of chemistry, pathology, and diseases of the nervous system.

The regular order of lectures opened on the 23d, with a good class in attendance.

The additions to the college which have been in progress during the Summer are nearly finished, and the building, as a whole, is one of the most complete of its kind in the country. As now enlarged, it provides a spacious and beautiful amphitheatre, two lecture rooms, pathological, physiological, and chemical laboratories, dissection room, waiting-room, museum, library, dispensary apartments, and several smaller and private rooms. The faculty, alumni, and their friends feel a just pride in these improvements and increased accommodations, and these in turn reflect much credit upon the zeal and earnestness of those who have projected and maintained this institution and the principles for which it stands.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO.

THE opening exercises of the Medical Department of the University of Buffalo were held Monday evening, September 22d, the introductory address having been given by Prof. Ernest Wende. Some changes have been made in the curriculum, such as the introduction of daily clinics at the General Hospital and ward classes, for the clinical study of disease at the bedside. During three days in the week lectures will begin at 9 A. M., instead of 10 A. M., as heretofore. Laboratory practice has been added to, and the dissecting rooms equipped with new facilities for work. They will be open during the evening from 7 to 10 P. M. The number of matriculants is very large, and all-in-all the present session promises to be a successful one in every respect.

CENSUS OF HALLUCINATIONS.

PROFESSOR WILLIAM JAMES, Harvard University, Cambridge, Mass., has been appointed to superintend the *Census of Hallucinations*,

which was begun several years ago by the "Society for Psychical Research," and of which the International Congress of Experimental Psychology, at Paris, last Summer, assumed the future responsibility, naming a committee in each country to carry on the work.

The object of the inquiry is twofold: First, to get a mass of facts about hallucinations which may serve as a basis for a scientific study of these phenomena; and second, to ascertain approximately the *proportion of persons* who have had such experiences. Until the average frequency of hallucinations in the community is known, it can never be decided whether the so-called "veridical" hallucinations (visions or other "warnings" of the death, etc., of people at a distance) which are so frequently reported, are accidental coincidences or something more.

Some 8,000 or more persons in England, France, and the United States have already returned answers to the questions which heads the census sheets, and which runs as follows:

"Have you ever, when completely awake, had a vivid impression of seeing or being touched by a living being or inanimate object, or of hearing a voice; which impression, so far as you could discover, was not due to any external physical cause?"

Any person who has ever had such an impression is requested to communicate the fact to Professor James, at the above address.

It is important that negative answers should be sent as well as the affirmative, for, otherwise, the report will have no value whatever as a census giving percentage of persons having such hallucinations.

AMERICAN GYNECOLOGICAL SOCIETY.

THE fifteenth annual meeting of the American Gynecological Society was held in the lecture room of the Buffalo Library, September 16th, 17th, and 18th. The roll-call showed twenty-two Fellows present. The local profession was well represented at all the meetings of the Society.

The session was opened by an address of welcome, delivered by Dr. Roswell Park, of Buffalo, after which the remainder of the morning was devoted to the discussion of the Diagnosis, Pathology and Treatment of Extra-uterine Pregnancy. The first paper on this subject was read by Dr. A. W. Johnstone, of Dansville, Ky. Dr. Johnstone advised laparotomy under all circumstances. A paper by Dr. Mann, of Buffalo, followed, in which the writer urged the

trial of electricity in certain cases. Dr. J. M. Baldy, of Philadelphia, was unable to be present, and his paper was read by the secretary, as was also a paper by Dr. Hanks on the same subject. At 1 p. m. the Society adjourned and accepted an invitation to lunch at Dr. Mann's. The members of the Buffalo Medical Club and a few other Buffalo physicians were invited to meet the Fellows.

The afternoon was devoted to the reading and discussion of a paper by Dr. W. C. Ford, of Utica, entitled, *The Question of Amperage in the Treatment of Fibroid Tumors by Electricity*.

In the evening, members of the Society were entertained at dinner by Drs. Mann, Park, Cary and Tremaine.

The morning session of the second day was opened by a paper on *Vaginal Fixation of the Stump in Abdominal Hysterectomy*, by Dr. Henry T. Byford, of Chicago. The Society then listened to an address on the Sanctity of Marriage, delivered by the President, Dr. John P. Reynolds, of Boston. The morning session closed with a paper on *Injuries to the Uterus during Labor*, by Dr. A. J. C. Skene, of Brooklyn. The Society then adjourned to the Buffalo Club, where they were entertained at luncheon by Dr. Ford, of Utica.

In the afternoon, Dr. H. A. Kelly, of Baltimore, read a paper on *Cephalematoma*, and Dr. Ashby, of Baltimore, discussed the subject of *Drainage after Laparotomy*.

In the evening, at a business meeting, the officers elected for the ensuing year were :

President, Dr. Reeve Jackson, of Chicago.

Vice-President, 1st, Dr. J. Taber Johnson, Washington.

Vice-President, 2d, Dr. S. D. Sinclair, Boston.

Secretary, Dr. H. C. Coe, New York.

Treasurer, Dr. M. D. Mann, Buffalo.

The papers read upon the third day were as follows :

A Modification of Tait's Operation for Laceration of the Perineum through the Sphincter, by Dr. H. T. Hanks, of New York.

The Resemblance of Benign to Malignant Disease, by Dr. Edward W. Jenks, of Detroit.

Laparotomy for Intra-Pelvic Pain of Sixteen Years' Standing, by Dr. Ashby, of Baltimore.

In conclusion, it may be said that the meeting, although small, was eminently successful. The papers were all well discussed, and many new and interesting facts brought out.

After the final adjournment, the Society were the guests, at

lunch, of Dr. Sutton, of Pittsburg, and then proceeded in a special car to Niagara Falls. After having visited all the points of interest at the Falls, the Society returned in time to dine at the Buffalo Club. Both the excursion to Niagara and the dinner in Buffalo were at the invitation of the Medical Club of this city.

We sincerely hope that some of our other National Medical Societies will soon choose Buffalo as their meeting-place. We can assure them of a hearty welcome from the profession here.

THE American Association of Obstetricians and Gynecologists held its annual meeting at Philadelphia, Sept. 16th, 17th, and 18th. It was a largely attended and very successful meeting, and we expect to notice some of the work accomplished at a future time. The officers for the ensuing year are: President, Dr. A. H. Wright, Toronto; Vice-Presidents, Dr. George H. Rohé, Baltimore; Dr. R. B. Hall, Cincinnati; Secretary, Dr. Wm. Warren Potter, Buffalo; Treasurer, Dr. X. O. Werder, Pittsburg. Executive Council, Dr. Albert Vander Veer, Albany, Dr. Clinton Cushing, San Francisco, Dr. Charles A. L. Reed, Cincinnati, Dr. L. S. McMurtry, Louisville, Dr. R. L. Banta, Buffalo.

DR. ELEANOR McALLISTER, of Newburgh, N. Y., has been appointed a member of the medical staff at the State Hospital, in this city, and has already entered upon her duties. She is a graduate of the Syracuse Medical College, being second in standing in her class. After several months of special work in gynecology, she accepted a position on the staff at the Willard State Hospital to fill a temporary vacancy, remaining there about six months, and giving abundant satisfaction to the managers and superintendent. She comes most highly recommended, and is an acquisition to our ranks, whom the profession of this city will heartily welcome.

Personal.

DR. WM. C. KRAUSS, of this city, and Miss Krieger, of Salamanca, were united in marriage at the residence of the bride's parents, September 4, 1890.

DR. DAGENAIS has removed from his old residence, 348 E. Eagle street, into handsome new quarters, which are located at 473 Virginia street.

DR. STOCKTON has returned from Europe, and is occupying offices with Dr. Jones, corner Virginia and Franklin streets, pending the completion of his beautiful new home, 434 Franklin street.

DR. H. Y. GRANT has taken offices in the Bachelor building, No. 30 West Tupper street.

Book Reviews.

MINERAL SPRINGS AND HEALTH RESORTS OF CALIFORNIA, with a complete Chemical Analysis of Every Important Mineral Water in the World. Illustrated. A Prize Essay. Annual Prize of the Medical Society of the State of California. Awarded April 20, 1889. By WINSLOW ANDERSON, M. D., joint editor and publisher of the *Pacific Medical Journal*; Assistant Chair Medical Chemistry and Materia Medica, and Teacher of Chemistry in the Laboratories of the University of California in the Medical and Dental Departments; Active Member of the American Medical Association, and of the Medical Society of the State of California, etc., etc., etc., etc. Pp. xxvii.—384. The Bancroft Company, San Francisco. 1890. Price, \$1.50.

A short introductory and a brief review of the theories on the Origin of Mineral Springs, is followed by a chapter on the Medicinal Uses of the Various Mineral Waters.

The author very justly berates all charlatans and quacks who claim for mineral waters a panacea for all "the ills that human flesh is heir to." "On the other hand," the doctor says, it would be quite "as flagrant an error to suppose that all the reputed beneficial effects of mineral waters were only the result of extravagant or interested imaginings." The patient is then advised to first consult his regular physician, and, after a thorough diagnosis of the case, to go to that spring recommended, armed with a letter to the resident physician. The patient should follow implicitly the direction of the resident physician, and never allow his own whims or fancies to dictate to him the course he shall pursue. The restless nature which characterizes the average American is taken into consideration, and the patient is advised to *never* "rush" the treatment. We are too liable to think that if two or three glasses of a mineral water per diem will do us good, a half dozen or more ought to help us much more and effect a more rapid cure. A very foolish notion, indeed. Apply the reasoning to other remedies and see how absurd it is.

All we need at American health resorts and mineral watering places is to follow the natural scientific regime which has been worked out for centuries in Europe. There every patient confides in his physician, and medical men abroad value the mineral springs more, apparently, than we do in America.

As the standard of medical education is so much higher in Europe than with us, it is no great surprise that so much confidence should be shown physicians abroad. We do not, in any way, mean to belittle the profession at home, for we have many men who stand among the first of the medical world. Aside from that, it is unquestionable that the standard of medical education at home sadly needs elevating. It is high time that the people arose in their righteous indignation and demanded that the "diploma mills" either closed their doors or raised their standard to such a degree that men, who are a lasting disgrace to the profession, be excluded.

The author makes a very strong plea that rational scientific treatment be pursued at mineral watering places, and that the patient follow implicitly the directions of the physician in charge.

In the chapter on The Therapeutic Action of Mineral Waters on the Human Economy, very much valuable information on the doses and therapeutic action of the various classes of mineral waters is given.

A great many analyses of mineral waters are given, showing Dr. Anderson to be an indefatigable analyst of the California springs.

This work is of great value to the physician and the chemist alike, and deserves a very careful reading by both professions.

J. A. M.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS. With especial reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By HOBART AMORY HARE, B. Sc., M. D., Clinical Professor of Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Laureate of the Royal Academy of Medicine in Belgium; of the Medical Society of London; Member of the American Association of Physicians; Secretary of the Convention for the Revision of the United States Pharmacopoeia of 1890; Physician to St. Agnes Hospital and the Dispensary of the Children's Hospital, Philadelphia. Cloth and leather. 8vo. pp. vi.—632. Philadelphia: Lea Brothers & Co. 1890.

This important work comes at an opportune time. The colleges have just opened and new students are seeking to enter upon the study of medicine. For them, and for older students also, the question of text-books is most important. We have some excellent and learned works on materia medica and therapeutics, but as Dr. Hare

well says, they consider the subject as if the student were a skilled physician or experimental pharmacologist. It is for this reason that this department is considered so very difficult. It requires close familiarity with the knowledge of drugs to treat disease successfully, and a book that arranges this knowledge with a view to the needs of students, becomes at once popular. We have but to refer to the famous work of Ringer in illustration. The rapidity with which its various editions have been exhausted has shown the need it fulfils. After a careful examination of Dr. Hare's work, we venture the opinion that when it becomes known it will rival the other in popularity. With great judgment he has placed before us a resumé, if we may so speak, of the action of drugs and other remedies, and of the treatment of disease. The student is not confused by the continual reference to authorities, and his confusion is not confounded by the detail of conflicting experiments. He is told what we know to-day in the broad field of therapeutics, and nowhere, that we recall, in this information given with more care and judgment. The author seeks in all cases where there is want of definiteness to give a fair and proper interpretation of the present views without any special pleading in favor of this or that conclusion. The work is divided into four parts, as follows:

Part I. General therapeutic considerations.

Part II. Drugs.

Part III. Remedial measures other than drugs. Foods for the sick.

Part IV. Diseases. Table of doses and remedies. Index of drugs and remedial measures. Index of diseases and their treatment.

The work throughout is arranged in alphabetical order. Of this departure from the ordinary arrangement the author says:

This has been done because it is desired to afford the reader a ready reference book to which he may turn at short notice for desired information, for at present the state of pharmacology is so unsettled that a true classification is impossible. Thus morphine may be classed by one writer as a *nervous sedative*, by another, as a sleep-producer, by a third, as a *bitter substance*, and by a fourth, as a respiratory depressant. Bromide of potassium can, with equal propriety, be called a spinal sedative or a cerebral sedative, or caffeine be classed as a cerebral stimulant, a circulatory stimulant, or a diuretic.

The book also contains the preparations of the British Pharmacopœia.

We cannot but believe that Dr. Hare has rendered a great service by the preparation of his work, and that it will receive the hearty indorsement of all teachers and students.

The volume is a beautiful specimen of the printer's art, and in this direction leaves nothing to be desired. F. H. P.

THE PHARMACOLOGY OF THE NEWER MATERIA MEDICA. Embracing the Botany. Chemistry. Pharmacy and Therapeutics of New Remedies. Being the results of the Collective Investigation of New Remedies. under the "Working Bulletin" System. Properly Arranged. Classified. Indexed and Placed at the Disposal of the Medical Profession. Issued in monthly parts. Subscription price. \$2.00. in advance: single copies, twenty-five cents each. George S. Davis. Detroit. Mich. 1889.

This work is divided into subjects, each subject representing one of the new drugs. Under the heading of each drug is found:

1. The botany of the drug, embracing names, synonyms, natural order, origin, history, commerce, production, description, microscopical structure, etc.

2. The chemistry of the drug, composition, analysis, etc.

3. The pharmacy of the drug, adulterations and substitutes, pharmaceutical preparations, incompatibles, etc.

4. The therapeutics of the drug.

1. Reports of experiments made upon animals to determine the physiological action of the drug.

2. Clinical reports, pro and con, published in medical periodicals, etc., arranged with reference to the diseases in which the drug has been tested, or with reference to the nature of its action upon the human system.

3. Resumé by a competent physician, giving the indications, antagonists, synergists, physiological action, toxicology and antidotes, dosage, etc., of the drug, as established by the reports of clinical and physiological investigators, above mentioned.

Five parts have thus far appeared, and the publisher is deserving of much credit and praise for the great pains taken to give the medical profession such reliable information in so compact and usable a form. We all know how unpleasant a task it is to be obliged to look over file after file of journals in order to find the information we desire.

This is a work which should be upon the table of every teacher of materia medica and of pharmacy. We bespeak for it a cordial welcome on the part of the medical profession. J. A. M.

RAILWAY SURGERY, A Practical Work on the Special Department of Railway Surgery; for Railway Surgeons and Practitioners in the General Practice of Surgery. By C. B. STEMEN, A. M. M. D., LL. D., Professor of Surgery in the Fort Wayne College of Medicine; Surgeon to the St. Joseph Hospital, etc. With numerous illustrations. 8vo, pp. vii.—315. 1890. J. H. Chambers & Co.

In his preface the author states his belief that a treatise upon Railway Surgery was urgently demanded, an opinion to which many surgeons will take exception. In fact, there is little in this work which may not be found in the completer surgical works. Still, the book contains much practical information, evidently written by a man of experience in surgery — not literature. There are a good many little hints which every surgeon who has had any experience with cases of railroad injury will appreciate. It is from a clinical point alone, however, that the book deserves recognition. There is much “padding” with quotations, and sometimes with subjects quite unrelated to railroad surgery. The author occasionally seems somewhat rusty, as, for instance, when he makes the statement as a histological fact that in the bones “in old persons the mineral (matter) greatly preponderates,” and such grammatical delinquencies as “a complete fracture is where, etc,” abound. In fact, the book is full of rudely constructed sentences and mis-spelled words. It is, indeed, hard to reconcile such a specimen of English with the degrees A. M. and LL. D., which are associated with the author’s name. The publishers have done their work well. The cuts are good, the type clear, and the whole dress of the work merits praise.

J. P.

ESSENTIALS OF REFRACTION AND THE DISEASES OF THE EYE. By EDWARD JACKSON, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. **Essentials of Diseases of the Nose and Throat.** By E. BALDWIN GLEASON, S. B., M. D., Surgeon in Charge of the Nose, Throat and Ear Department of the Northern Dispensary of Philadelphia, formerly Assistant in the Nose and Throat Dispensary of the Hospital of the University of Pennsylvania, etc. Saunders’s Question Compend No. 14, with 118 illustrations. 12mo; pp. viii.—276. Philadelphia: W. B. Saunders. 1890.

We have heretofore expressed a favorable opinion of this series of Question Compend. Upon examination this volume seems up to the standard, and will serve the student well upon the subjects of which it treats. We are at a loss to understand why diseases of the eye, nose and throat are associated in one volume. The natural arrangement is to connect diseases of the nose, throat and

ear in one specialty. This may be seen not only in individual work, but in that of large associations. In most of the latter there is one section, for instance, upon diseases of the eye and another section upon diseases of the nose, throat and ear. This is as it should be. To place a book in the hands of students that does not express this natural arrangement, we believe to be a mistake. We trust that in future editions the publisher will recognize this suggestion. He will then have a volume that teachers can safely recommend.

F. H. P.

PHILOSOPHY IN HOMEOPATHY, addressed to the Medical Profession and to the General Reader. By CHARLES S. MACK, M. D., Professor of Materia Medica and Therapeutics in the Homeopathic Medical College of the University of Michigan at Ann Arbor. Chicago : Gross & Delbridge. 1890. Pp. 174; cloth, 8vo.

The author of this book looks on one side of the shield and tells us just what he sees from his standpoint. There is an earnestness in his style which we wish was devoted to matter which carried conviction.

But he is too firm a believer to convince. He is one of the few men who elevates a human system to a Divine law. He says: "I believe that homeopathy is without flaw." Believing this, we do not see how he could very well be anything but a homeopathist.

The publishers' work is well done.

J. W. P.

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NOTICE TO CONTRIBUTORS.

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All communications should be addressed to

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No. 4.

Original Communications.

CERTAIN CAUSES OF MAJOR PELVIC TROUBLES TRACEABLE TO MINOR GYNECOLOGY.¹

By JOSEPH PRICE, M. D., Philadelphia, Pa.,

Physician in Charge of the Preston Retreat; Fellow of the American Association of
Obstetricians and Gynecologists, etc., etc.

WITH the present popular cry of "conservatism," in reference to operation in cases where it is held that all treatment should be tried previous to real surgical interference, it is worth while asking whether this preliminary treatment should not itself be abandoned in the hands of those who plead most pathetically for it. Their cry is not a scientific plea, but in most instances a *personal bid* for indulgence while they try to accomplish something, without acknowledging on the one hand that there is little or nothing to encourage them in their work, so far as results are concerned; and on the other, that there is abundant proof from the cases that have come out from under their hands, with one treatment or another, that manifold and really major surgical affections arise merely from treatment recognized as orthodox from the standpoint of minor gynecology. So far as my own experience is concerned, I do not hesitate to put minor gynecology in a casual relation with a vast amount of the necessary major pelvic surgery coming under my attention.

First among these causes may be mentioned the Emmet cervical operation. Like many other surgical operations, this, when first explained by its distinguished originator, was done in season and out, by every one, without the least consideration of its contraindications. Very many minor tears of the cervix, in which a cosmetic effect only is obtained by operation, are made distinctly worse by operative interference. In many cases the pain becomes insufferable, from the lighting up of a dormant or unrecognized

1. Read in the Philadelphia County Medical Society, September 24, 1890.

pelvic trouble, and operation is required to undo the mischief of an unnecessary cervical closure. This fact has been recognized by Emmet himself, and he has counseled the careful selection of cases in order to escape these disastrous results. It should be set down that where there is preëxisting pelvic disease, even though slight, no cervical operation ought to be tried unless absolutely required by the condition of the patient. Another operation, which has met with much approval in many directions, and which some measure of success seems to follow in some cases, is the forcible dilatation of the cervix. It is clear that where there is antecedent inflammation of the pelvic viscera, that is of the genito-urinary system, such an operation as surgical dilatation of the cervix cannot be free from danger. In order to relieve dysmenorrhea by this procedure, it must evidently be due to stenosis of the os or cervix.

The question here arises, Can it be told, in dysmenorrhea, wherein its causes lie? Sometimes; but not infallibly. The fact is that in many women where a stenosis would be diagnosticated, there is no difficulty whatever attending the menstrual flux. This being the case, it is evident that a diagnosis cannot be made by simple observation without a careful study of all the symptoms. Again, in many women the causes for this condition are complex. It will not do to lose sight of this, and conclude that because a flexion exists, dilatation will remedy menstrual pain. It is to be remembered that if there is coëxisting pelvic inflammation, dilatation will increase it, and, under certain conditions, cause it if absent. Rapid dilatation of the cervix is a distinct traumatism, and along with it run all the dangers incident to septic absorption that attend any other violent procedure, and where traumatism, incident to natural causes, is confessed to be the cause of so much subsequent mischief, it ought not to be *expected that operative injury can be harmless*. This conclusion, reached inferentially, has been abundantly confirmed practically on the operating table by much of my later pelvic work. In a number of cases, with a history of preceding dilatation, the after-operation has exhibited an inflammatory condition of affairs as complicated as any other in my experience. Some of the dilatations were done with preëxisting disease, which was made worse by this interference, while others were done simply to relieve the dysmenorrhea, and resulted in the establishment of a complicated surgical disease in which operation was *necessary purely to save life*. All in all, I believe that, judged simply by its remoter effects, the operation of rapid dilatation is a dangerous

one, and results oftener in subsequent harm than in lasting good. The surgical injury to the cervix is, in many of these cases, more pronounced than the tears of the cervix which it is the intention to remedy by Emmet's operation. In this case there is operation at each horn of the dilemma, and the results are often equally bad at both. Simple closure of the cervix in cases of pelvic disorder almost certainly exacerbates the symptoms. The necessary inflammatory action set up in the suture tract is transferred along the lymphatic or venous channels to the seat of the earlier inflammation; this is lighted up anew and goes on in its development until a pelvic peritonitis is kindled or rekindled, which at last entails a major operation. The minor gynecologist, as such, who has no regard for, or appreciation of, the relation of the commonly advocated general closure of perineal and cervical tears to major surgical complications, cannot but be a great factor in the causation of the same. In Pepper's *System of Medicine*, vol. iv., there is on record a case in which the operator hoped to cure a pelvic inflammation by the derivative effect of a perineal or cervical operation. Needless to say, pelvic operation was afterward done. Such a cure is no less ridiculous than the so-called "faith cure," and is certainly more actively harmful.

That the inconsiderate use of the uterine sound has been responsible for much inflammatory pelvic trouble, is scarcely to be disputed. This is not because the sound is of itself a dangerous instrument, but because it is put into the hands of every tyro as an instrument of diagnosis. If used at all, it should be in the hands of those with whom its application, by reason of their skill, will be exceptional, not usual, and the rule should be that in the hands of the non-expert it should be forbidden. The more expert and experienced the specialist, the more rarely will the instrument be required. My own rule is, that in cases in which it might at first seem indicated, a little patience and diligence will obviate the necessity of employing it. The indiscriminate use of the sound and electrode is the most serious MECHANICAL objection to the employment of electricity. Every sitting for the electrical treatment is prefaced by the use of the sound, and followed necessarily by the introduction of an electrode of some form. This is by a class of men who, in the main, have had no *previous gynecological training or education* whatever. In such hands such methods can only be harmful, and we are now reaping the fruits of their work in a class of pelvic operations not surpassed in the complications presented.

Along with the sound and in the same category may be placed the curette. Dilatation, with curetting of the uterus, have placed to their credit a long *series of major operations*.

Another class of cases coming under this head are those in which there has been a long time during which intra-uterine applications have been made. All the caustics in the catalogue have at one time or another been in favor, as cure-alls, in intra-uterine therapeutics — nitric acid, chromic acid, nitrate of silver, and the rest. For a woman to have undergone a routine treatment with this list, and to have escaped pelvic inflammatory trouble, is little short of a miracle. A careful inquiry into many of the cases coming under my care, directly and indirectly, reveals the history that all sorts of minor procedures were tried, only to fail and apparently hasten the necessity for operation. I shall refer to and illustrate these points by the citation of cases in the discussion.

DISCUSSION.

Dr. E. E. MONTGOMERY : I fully second what Dr. Price has said with regard to the frequency of troubles necessitating major operations which result from the various methods of procedure in minor gynecology. I do not think that any person who has practised gynecology has not met with cases of inflammatory trouble of the uterus traveling to the ovaries and to the peritoneum, giving rise to conditions which have been described as peri- and parametritis, which have resulted from the use of the uterine sound. When we consider the fact that the uterine sound has been a part of the routine method of examination of many physicians practising this branch of the profession, it is not surprising that these troubles should so frequently occur. The uterine sound, as has been stated, should not be introduced in any case until the patient has been thoroughly examined, and the presence or absence of any inflammatory condition in the uterus, or about it, has been eliminated.

The practice of Emmet's operation upon cases as soon as they consult a physician for treatment, where a slight laceration is found and the physician at once attributes the symptoms to this lesion and performs the operation, has justly led to its discredit. The operation is undoubtedly one which, in some cases, is of great benefit ; it is so, however, in properly selected cases. No case in which the presence of other inflammatory conditions has not been eliminated or cured by proper methods is suitable for the operation. One reason, I think, why Emmet's operation has proved so disastrous in many of these cases is the fact that, as the result of sub-involution of the mucous membrane from this lesion, we have an increased amount of secretion which, after narrowing of the cervical canal by the operation, is unable to escape

freely ; consequently, the uterus becomes dilated to a certain extent, and this favors more rapid extension into the Fallopian tubes, and the development of serious trouble. One cause of the extension of inflammatory trouble from the uterus to surrounding parts is insufficient drainage from the cavity of this organ.

Then, again, Dr. Price very justly condemns the use of irritating materials, which have been employed in the cavity of the uterus. Many who have proposed agents for the treatment of inflammatory troubles in the cavity of the uterus have seemed to labor under the idea that the only method of curing these inflammatory lesions was by destroying the mucous membrane in which they originated. The application of nitric acid, chromic acid, nitrate of silver in stick, and the like, results in relief by destroying the mucous membrane from which the secretions take place. In this way inflammation may be caused which may extend to the deeper structures of the uterus and to the pelvis. I fully agree with all that the gentleman has said in regard to the importance of care in the treatment of these various classes of cases, to avoid adding to the discomfort and to the crippling of the whole future of the individual who applies for treatment.

Dr. JOHN C. DACOSTA : I am glad to hear Dr. Price speak of the dangers of minor gynecology, but I do not know how we shall get along without it, unless we adopt the rule (which he leads us to infer from his paper is his) that in all these ailments we open the abdomen and remove the tubes and ovaries. I hardly think that Dr. Price is right in attributing the major pelvic troubles to gynecological treatment, for, from the little that he has said, I think that we may infer that the pelvic trouble already existed, and the practitioner made a mistake in treating the uterus rather than the uterine appendages. I am glad to hear him speak in regard to Emmet's operation. I have heard long lists of cases reported with the statement that "all recovered without bad symptoms." That has not been my fate. One of the hardest fights that I have had for a woman's life has been after an operation on the cervix. Many unnecessary operations are done on the cervix. They are often done by men who want to make a record — by men who practise gynecology without knowing much about it. They see a torn cervix, and, without knowing whether or not the symptoms are due to that, proceed to operate. They do it, also, without properly preparing the patient beforehand. Where a lacerated cervix needs operation, as a rule, it needs previous treatment. If the cervix is put in proper condition, there will not be the same liability to bad results.

There is probably no instrument that is more used in minor gynecology than the dilator, and there is probably no instrument that can be more abused than the dilator. Prof. Goodell has reported to this Society many cases in which forcible dilatation has been used with

grand results. I have used forcible dilatation in many cases and have never had any bad results. The reason is that when I began the study of gynecology, I was taught how to use it properly and not to use it in every case. Take the sharply bent womb, and all the pessaries made will not straighten it. You must put something inside, either a dilator or a sponge-tent. Again, let the uterus become congested and the mucous membrane swollen, closing the uterine canal and causing dysmenorrhea. You can cure that case in from two to four treatments by dilatation, while you may treat it by other means for months without doing good. The dilator is a surgical instrument, and one which must be handled carefully. You must know how to do your work before you attempt to use it.

Now, in regard to the use of the sound. I hear gentlemen state that they can outline any uterus without the sound. I have tried that, but have never been able to do it. Take a uterus enlarged, like this sketch, and I defy any one to say in what direction the canal runs. It may be a uterus in the normal position, with a fibroid in the posterior wall, or it may be a retroflexed uterus with a fibroid on the anterior wall, or a plastic mass between the uterus and bladder. It behooves us to use the sound carefully. If a man tries to force the sound into the canal, he will certainly do damage. If, however, he will outline the shape of the uterus as well as possible, and then bend the sound to fit as nearly as may be, and then make effort after effort, he can, in the most distorted uterus, get the sound in without damage.

Then, in regard to the curette. These usually have a sharp cutting edge. Such an instrument is hardly safe for an able practitioner to use, and is not safe at all in the hands of an unskilled person. Where inflammation extends from the uterine cavity to the tubes, after the use of the curette, it is not so much from the instrument as from the man who uses it.

I should be loath to give up intra-uterine applications. I have used them a long time, and, while sometimes pain has been caused, they have never done any serious damage. As Professor Wallace used to say, "Some uteri are sensitive to the slightest touch, and some are as stupid as oxen." When you make an application you must know the uterus which you are treating. Nitrate of silver used to be a common application, but it is one of the worst that you can make. It will, as a rule, produce cicatricial contraction of the canal. Nitric acid, although so much stronger than nitrate of silver, is not so apt to do this; but nitric acid is rarely required. In a case of fungous granulation I should not hesitate to scrape out the whole inside of that uterus and make a strong application, and, after watching the patient for a short time, send her home and not expect to have any trouble. This is because I know my cases. I do not do it in every case.

I think that Dr. Price will find that the dangers from minor gyne-

cological operations are more because of want of good, sound judgment in the practitioner, and not so much in the operation itself. I cannot agree that pelvic troubles are always due to these minor operations.

Dr. JOSEPH HOFFMAN: I have put on record in the Obstetrical Society a case where the uterus was perforated by the curette, and this case serves to show that the remarks of Dr. DaCosta enforced the argument which Dr. Price endeavors to bring out, to-wit, the danger from the wide-spread use of the uterine sound, the curette, and the dilator, as advocated by some. I believe that if we took all the gynecological instruments invented and put them together and multiplied them by ten, we should have no such instrument as gives such bad results as the dilator. It is easy for Dr. DaCosta to claim that he knows when to use it and when not to use it. I think that he over-estimates his ability to say whether he has ever done harm by it, for patients rarely come back after they are harmed. I have seen today two patients that had been treated by the curette, and from whom I have removed the appendages. In one case that I know of, the uterus was torn by the dilator, then a sponge-tent was put in and allowed to remain I do not know how long. You know the rest. In the case in which the uterus was perforated by the curette, the operation was done by a gynecologist of considerable experience. Nevertheless, the uterus was ruptured and peritonitis was brought on and abdominal section was necessary to save life. I have today seen two other women who were treated by minor gynecology; they were both left very miserable. In one the vagina is much contracted and the pelvic viscera are certainly affected. In one of these cases, especially, electricity was used *ad nauseam*. The history is this: first, dilation and scraping; then, closure of the perineum; and then, opening of the abdomen. In regard to operations on the cervix and perineum, we are to remember that operation on the perineum is not so apt to cause trouble as operation on the cervix.

What operations on the cervix are necessary? Every cervix with a slight laceration does not require operation. Some of these heal without suture, although traces of the damage may remain. The preparation of the patient often shows that operation is unnecessary — puncture and the ordinary derivative procedures so reducing the size of the cervix that the laceration almost disappears.

In regard to ulceration of the cervix, I do not believe that there is such a thing, except as the result of bad laceration or specific disease. In laceration the ulceration is only apparent; it is really an erosion due to eversion and hypertrophy.

The curette in some cases seems to be a necessary evil which we cannot do without. I have found it useful in getting rid of putrid *débris* from a miscarrying uterus, in the early weeks of pregnancy, when the use of the finger is thoroughly clumsy and painful, if not impossible, without previous dilatation with a tent. In the presence of such deten-

tion, the use of the tent is not without danger, since, during the period of its presence in the cervical canal, the channel of escape for decomposing material is shut off. I can say that I have had no bad results, that I know of, in the use of the instrument.

As to the use of the sound, its use seems more confined to those who are wedded to the traditions of the instrument than from any *actual* value that can be attached to it. On the other hand, it is capable of doing much harm in the hands of those who need it most, because they know least about it and the parts with which it has to deal.

Dr. WILLIAM E. ASHTON : The question of the use of the dilator depends upon one or two facts. First, as to the condition of the uterine appendages and their surroundings ; and, secondly, properly selected cases. I do not imagine that anyone would use the dilator when we have present acute or chronic inflammation of the uterine appendages. I think that anyone who has had experience in the use of the uterine dilator would hesitate to employ it except in selected cases. I believe that where we have the pelvis perfectly free from local disease, and in cases where the uterus is strongly anteflexed and perfectly movable, and upon the introduction of the sound we find that there is a point of intense pain at the internal os, we shall find in a certain proportion of cases that good results are obtained from the dilator. It is nonsense to talk about the causes of dysmenorrhea. It is only a symptom. The vast majority of cases of dysmenorrhea are cases which have a distinct tubal or ovarian origin. It would be absurd to rapidly dilate in such cases.

In regard to Emmet's operation, I quite agree with Dr. Price in reference to minor gynecological operations dealing most disastrous results in the pelvis. We have to look only at the various clinics, and see the recklessness with which various operations are done, to see why we have so many abdominal sections. The reckless use of the sound and of uterine applications are responsible for many of these cases. I hold that the sound should only be used after a diagnosis is made. If the diagnosis is made, of what use, then, is the sound ? In a case like that figured by Dr. DaCosta, I do not care what direction the uterine canal takes. If it is a fibroid, I do not see of what use such knowledge would be.

I cannot understand how any man can use instruments where there are inflammatory conditions around the pelvis, because they are a source of irritation and may light up acute inflammation in chronic cases. It should go on record that the uterine sound should only be used by men who have a thorough knowledge of the pathology of the pelvis, and who can appreciate the great danger incident to inflammatory troubles in the pelvis.

I agree with Dr. Price that there are few cases in which Emmet's operation is necessary. I grant that there are cases in which the uterus is in a state of subinvolution, where a plastic operation will bring

about the cure, but I do not believe in operating on the uterus if there is any diseased condition of the appendages. Any manipulation under such circumstances is apt to set up inflammation. Four years ago, I had a case of bad laceration of the cervix in a woman, with pus tubes on both sides. I refused to operate on account of the disease of the appendages. She then went to New York, and was operated on by a prominent gynecologist, and died of large abscess, the result of the operation lighting up the old inflammation.

Dr. DaCOSTA, in answer to Dr. Ashton : I probably did not make myself clearly understood. I do not want it understood that I would do an operation on the cervix if there was inflammation in the pelvis, such as a pus tube or anything else. My teaching is : When there is violent inflammation in the pelvis, not to do any operation on the uterus, and to hesitate to use the sound. The discussion has run off from the original text, and it is for that reason that I make these additional remarks.

Dr. J. M. BALDY : I think that there is no question in the minds of gynecologists that Emmet's operation is a much abused operation. I think that it is also true that the vast majority of these ill-advised operations on the cervix are done by men who have no gynecological experience and who know very little about gynecology. I can recall two cases in which I was recently called to operate on the cervix by general practitioners, and by whom I was informed that the lacerations were very bad and the women were suffering greatly. On examination, the tears proved to be comparatively slight, and needed no interference. There are some cases in which a cervix operation at first sight appears justifiable. These are cases in which the cervix is torn to the vaginal vault. I care not if the cervix be torn on both sides to the vaginal vault, if there is not eversion and erosion, or much scar-tissue, there is no reason for operation.

I should be loath to give up forcible dilatation in certain cases. It is not to be done in every case of dysmenorrhea, for the vast majority of cases of dysmenorrhea are due to ovarian or tubal disease. I believe that in the vast majority of cases where trouble follows the use of the dilator, there has been preëxisting pelvic trouble. I do not think that a carefully done dilatation in a healthy pelvis will do harm. It is admitted that it does tear uterine tissue, but that this can cause trouble, unless the wound becomes septic, I am not prepared to admit.

The use of the sound in the hands of a doctor is in inverse proportion to his skill. The man who is skilled, rarely uses it. In such cases as have been mentioned by Dr. DaCosta, I see no use for the sound. I do not see anything essential that it could tell. I must say that I have not seen a uterus of the exact shape he has figured on the board. In the vast majority of cases I have been able to tell which was fundus and which was tumor. If we are dealing with a fibroid, it makes no

difference what wall of the uterus it occupies. I do not suppose that I use the uterine sound once a month.

The curette, I think, is a valuable instrument, but it is abused and used indiscriminately. After abortion, I find it most valuable. In some cases of chronic endometrial disease it is valuable. I believe that it will remove almost all necessity for intra-uterine treatment. I find such applications rarely called for, except, perhaps, the application of nitric acid or iodine, after the use of the curette. I think that the dull curette is useless. The only rational instrument to use is the sharp curette. I was recently called some seventy miles to see a case where the physician assured me that the uterus contained nothing, as he had twice gone over it thoroughly with the dull curette. I used a sharp curette and removed large masses of placental tissue. The sharp curette can be used with as little danger as any other instrument, if used properly in skilled hands.

Dr. J. M. FISHER: I am engaged in treating a number of uterine troubles with electricity. Dr. Price has stated that the use of the electrode is fraught with much danger. That the introduction of any instrument into the uterine cavity carries with it a certain risk is not denied, but that the electrode is especially responsible for many of the diseases can certainly be questioned. There are certain diseases of the uterine tissue and lining membrane that can be most effectively treated by properly applied galvanism. I can cite one case in which the use of electricity saved the patient from undergoing a major pelvic operation. A woman, forty-two years of age, had a fibroid uterus with hemorrhages, so that she was confined to bed half the days of the year. At the time that I was called she had been laid up for nine weeks and was exsanguine from loss of blood. She had been treated by two good practitioners, and, failing to give her relief, operation was proposed and about to be done. I made a positive application of electricity, and, after the first or second application, the hemorrhage was arrested. Four applications, extending over a period of twenty-one days, were made. This was in November and December, 1889. After that she menstruated regularly until May, when she was again seized with hemorrhage. I was out of town, and the bleeding continued three weeks. On my return, I made positive application of electricity, and since then the menstrual discharge has been regular, lasting three or four days.

Dr. C. P. NOBLE: I am glad that this matter of the uterine sound has been brought up, because I am convinced, as the result of my experience, that the less the uterine sound is used, the better for the patient. In most cases but little information is gained. Recently a case passed through my hands in which the question of pregnancy was mooted. She afterwards fell into other hands, and the sound was

passed three inches and the patient was supposed not to be pregnant. She was, however, seven months pregnant, as subsequent events showed. The information given by the sound is often delusive. I, however, cannot see that the simple passage of the sound, provided it be clean and passed through a speculum, with a clean cervix, should set up pelvic inflammation, provided such trouble does not already exist. This, however, is neither here nor there, for I do not see that we need to use the sound in diagnosis. In small uteri it is not needed, because the organ can be outlined bimanually; while in large uteri, where tumors are present, the instrument may not reach the fundus and so give incorrect information.

I must agree with Dr. Baldy, rather than with the author, in regard to rapid dilatation. I should be loath to give it up. I have never seen harm follow rapid dilatation in any case. This is due to the fact that dilatation has been used in cases in which the disease is limited to the uterus. I agree that it is useless and dangerous to dilate the uterus when tubal disease is present. In uterine disease it is capable of doing a great deal of good. I am quite sure that a certain number of cases of tubal disease are set up by a narrow cervix. The secretions of the uterus cannot gain egress and set up endometritis, and the inflammation travels into the tubes. In these cases, if the cervix is dilated to allow the freer egress of secretions, it will be a positive factor in the prevention of tubal inflammation. In such cases as were mentioned by Dr. Ashton, of acute ante flexion, the dilator does a great deal of good.

In fact, in regard to all these minor measures which have been mentioned tonight, I find them of service, but the fact must be emphasized that they are useful only when the disease is limited to the uterus; and that the uterus should not be operated on, in any way, in the presence of pelvic inflammation, particularly abscess.

Why we should give up the curette I cannot understand. There are many cases of hemorrhage from the uterus due to uterine disease purely, where there is no ovarian or tubal disease. In such cases the use of the curette will permanently control the hemorrhage.

I think that one reason septic troubles follow minor operations is because antiseptic precautions are not observed. I think that is the case with the dilator. If used on the office table, it is impossible to employ complete antisepsis. If such precautions are used, and there is no extrauterine inflammation present, I do not think that inflammation will follow any of the minor gynecological operations.

Dr. PRICE: I am sorry the discussion has taken the direction that it has, for it does not give me an opportunity to express myself thoroughly: it does not give me an opportunity of pulling out a number of telegrams: it does not give me an opportunity of calling things by their right names. I have thrown down the gauntlet, and no one has quite taken it up. Some one has spoken of minor gynecological methods.

In a recent article a writer prefaces what he has to say by giving details of methods for the treatment of "ordinary gynecological troubles." I do not know what "ordinary" gynecological troubles are. If it means from nine o'clock to three in an office, with a nurse and a Sims's speculum, peeping at cervixes, and taking ten dollars from each patient, then I understand it. He is the great mischief-doer. He tinkers, dilates, cures, and passes the sound, and in from four to six weeks I get a telegram to come and open the abdomen to save the patient's life; that the woman is leaking; that she has a pulse of 130-140, with a temperature of 104 degrees. This occurs weekly.

A speaker stated that there is no harm in electricity. Three fibroids in that jar have pus in them as the result of the use of electricity. Of the twenty specimens in that jar, removed during August, fifty per cent. followed dilatation, closure of the cervix, the use of the sound and the curette. These specimens have come from four clinics in this city, and from ten prominent gynecologists. They all had sections done to save life, and all were greatly complicated operations.

In regard to the sound, Dr. Ashton has said all that I am capable of saying. I have not used the instrument for many years. It is a common method of determining the existence of pregnancy, particularly among homeopaths, although not confined to them.

In comparison with the former state of the same subject, we must inquire into the causes which must have been at work during the past few years. This private-office work has a great deal to do with it. Many of these men are simply cervix feelers, and never find anything above it. There may be a mass larger than the uterus on one or both sides, which they fail to find. They are not anxious to find them, and would not be troubled by them.

The dysmenorrhea in an infantile uterus has nothing to do with the uterus. Pelvic pain in all infantile conditions of the uterus and pelvic viscera is exceedingly common. In these cases dilatation avails nothing. Dr. Baldy says that he uses the sound once a month. I presume that he dilates about once a month. I will consider together drainage of the uterus, referred to by Dr. Noble, and the use of the sound and dilator, referred to by Drs. Baldy and Noble. The sound measures about two lines in diameter, but we will say that it measures only one. I am sure that the drainage is quite sufficient through a canal one line or more in diameter. I find that those who have such a love for dilatation always precede it by the use of the sound. If they use it for drainage, the indications are not clear.

Dr. BALDY: I would ask to what part of my remarks Dr. Price refers. He has entirely misunderstood me. He stated that presumably I dilated for drainage, and that I first pass the sound, which will of itself establish drainage, without the dilator. My remarks were not in regard to dilatation for drainage or anything of the kind. I do not know

that I specified what I would dilate for. Time did not admit of my discussing that point. In regard to passing the sound once a month, I do not know that I meant to make that a positive statement. The statement was simply made to illustrate the infrequency with which I use the sound.

Dr. PRICE : I thought that I had made that clear. I said that I would call attention to two points — that of drainage, as referred to by Dr. Noble, and the sound and dilator, as referred to by Dr. Baldy.

In regard to closure of the cervix, there are a few cases in which the operation is of importance, but the ordinary method of closing the vaginal surface of the cervix only is very imperfect. This forms a large cuspidor-like cavity or retention sac. I have repeatedly split these up, freshened the cervix, and made a perfect cure.

I have thrice this Summer been called out of the city to open the abdomen in cases in which dilatation had been performed a short time previous.

Disease of the cavity of the uterus and fungous vegetations are far from common. Many healthy uteri are curetted, and it is thought that granulations are found. If the woman had been let alone she probably would have conceived. The same is illustrated by a class of cases which I have studied among women locked up in a reformatory. Some twenty or thirty women, who had been living lives of chronic inebriety and lust for three or more years, had none of them conceived. After six months' rest, iron and good diet, the greater number conceived on leaving the institution. In these cases no intra-uterine treatment was employed, and only one examination was made to determine the position of the uterus and its relation to surrounding parts in the pelvis.

As a diagnostic instrument, I do not see why any one should want to use the sound. As a student, I never could see what was gained by the use of the sound ; in the hands of the trained or experienced it is not needed, and in the hands of the inexperienced it is dangerous. Too much prominence is placed upon an unhealthy condition of the uterus ; it does not often exist ; it is exceptional.

HEMATOMA AURIS.¹

By B. H. GROVE, M. D.,

Surgeon to the Erie County Eye, Ear, and Throat Infirmary.

THIS affection is commonly known as the blood tumor of the ear, or the *asylum ear*. Its medical synonyms are *perichondritis*, or *chondromalacia auris*. These terms are not, however, altogether applicable, and hence have been the source of considerable confusion.

¹ Read before the Buffalo Pathological Society, September 19, 1900.

Some sixteen or eighteen cases of hematoma auris have come under my observation. The larger portion were among the mentally insane.

I am under obligations to Drs. Hurd and Bryant, of the Buffalo State Hospital, and Dr. Parker, of the Erie County Insane Asylum, as well as Dr. Meidenbauer, for the opportunity of witnessing lately some acute cases of hematoma auris, as well as some of the conditions following such attacks.

Hematoma auris is characterized by congestion and heat in the auricle, and a rapid effusion of blood or some of its constituents between the cartilage of the auricle and its perichondrium, or into the substance of the cartilage itself.

The tumor, in the course of a few hours or days, becomes the size of a bean or a small hen's egg. It is always situated on the anterior or concave side of the auricle. The auricle may retain its normal color, but more often it takes on a purplish hue. The tumor may pass through a low grade of inflammation.

It is in a mild degree hot and dense to the touch, and often fluctuation is barely perceptible. Its manipulation causes the patient but little pain.

All portions of the auricle, except the lobule, contain cartilage. Cartilage is also a partial constituent of about one-half the length of the external auditory canal. Naturally enough, then, the lobule is never involved. This is likewise the case with the tragus, for some unexplainable reason, although it contains cartilage. The patient generally complains of some burning pain, with a feeling of weight and distention in the new growth. The earliest manifestations of the disease are rapid, but after the tumor has become fully formed it may remain apparently in *statu quo* for days or weeks.

Finally, it may rupture spontaneously, which is the most general method of its disappearance. When this is not the case, the blood may become coagulated and absorbed. Whichever course is pursued, there nearly always follows a permanent and characteristic deformity of the auricle, which is more or less marked. When the tumor has reached its full size, it has a peculiar doughy feeling, which once experienced will be remembered. Its occurrence is generally unilateral, although in the insane it may be ambilateral. It is not uncommon, however, to find hematoma auris affecting each ear of the insane, with an interval of a few months to a few years. A little before, or at the time of the

development of this blood tumor, there is often noticed, with the insane at least, during cerebral excitement, a congested appearance of the face, eyes and ears.

About fifty years ago, Dr. Henry Bird described six cases of hematoma coming under his observation. He noted the intimate relationship of the disease to insanity, but he could not account for its origin, having never traced it to traumatism. Since then various German, French, and American writers have contributed largely to this interesting subject.

The aurists, Gruber, Hartmann, Politzer, Buck, Roosa, and Pomeroy, have each mentioned a few typical cases among the mentally sane.

However, Virchow, in his work on tumors ; E. R. Hun, in the *American Journal of Insanity* for 1870, and Samuel Sexton, in the *Medical Record* of 1884, are the authors who, according to my opinion, have presented us with the most complete and satisfactory description of this interesting affection. In this paper, therefore, I shall draw largely from their experience in connection with my own limited observations.

We must not forget to mention later on, however, the instructive experiments of Dr. Brown-Séquard in regard to this subject.

It will be noticed, after comparing the literature on this affection, that there exists a great discrepancy in the conclusions arrived at by the various observers. This applies especially to the etiology and treatment, and even in a measure to the pathology. One author contends that hematoma occurs more often in the left than the right ear ; that males, by a large majority, are more often affected than females ; that never, or hardly ever, is it present with the sane ; that it is idiopathic, depending on pathological conditions of the brain, and is incapable of being produced by violence alone ; on the other hand, that, as a rule, violence, or traumatism of some sort, is the cause, both in the sane and insane.

Dr. Hun gives the history of twenty-four cases of hematoma auris in the insane. Of this number twenty-three occurred in males. The form of insanity was general paresis in eight, melancholia in six, acute mania in four, and dementia in two.

It will be observed from this classification that when hematoma auris occurs in the insane the symptom is to be considered unfavorable, because it suggests an incurable form of brain disease.

Dr. Sexton asserts that out of 1,300 female insane patients, sixteen cases of hematoma auris were found, or about 1.14 per

cent.; and out of 1,200 male insane patients, fourteen cases, or about 1.10 per cent. On the other hand, out of nine cases among the mentally sane examined by the same author, all were males except one.

About fifteen cases among the mentally sane, besides the nine mentioned above, have been reported by American authors.

Of course, this must be but a small portion of actual cases. Two such cases have, not very long ago, come under my own observation, which have not been reported. Moreover, these were idiopathic in origin. The causes then, you notice, of hematoma auris among the sane are idiopathic as well as traumatic. With the insane, even, the origin may be traumatic, as well as dependent upon cerebral congestion and reflex irritation of the nerve centers, through the emotions. According to all authors there is always a tendency in general paresis to an unusual determination of blood to the head, and it is supposed that the blood-vessels of the ears become so dilated as to make the effusion possible. The other factor causing hematoma auris, namely, centripital irritation of the sympathetic, is present, especially with the insane, because they are subject to excessive attacks of excitement, while their emotions are but little under their control.

Dr. Hun is so strongly of the opinion that the idiopathic othematoma are symptoms of insanity, that he would consider it policy for any person having such a tumor, even if sane, to be carefully observed as to cerebral symptoms.

On the other hand, Dr. Sexton is convinced, from his investigations, that hematoma auris is nearly always caused, both in the mentally sane and insane, by some external means. From two cases under my own observation some time ago, I know hematoma auris can occur idiopathically in the mentally sane. Under treatment one case resulted in a deformed auricle, while the auricle of the second patient became virtually normal.

With regard to the etiology, the experiments of Dr. Brown-Séquard, as witnessed and described by Dr. Roosa, are interesting and instructive.

Dr. Brown-Séquard has found that sections of the restiform bodies, or largest columns of the medulla oblongata in animals (guinea pigs), will produce a hemorrhage beneath the skin of the auricle in from twelve to twenty-four hours. This hemorrhage is soon followed by gangrene of the part. The hemorrhage usually occurs in the fossa helix of the auricle, and in the ear corresponding to the same side of the section.

Dr. Brown-Séquard also states that section of the sciatic nerve, by reflex action upon the medulla, would produce the same result. He believes that disease of the base of the brain, which is, however, not always attended by insanity, is the cause of hematoma auris. He thinks, moreover, that gangrene does not occur in man simply because the tissues of the ear are more capable of resisting the pressure than in the lower order of creation.

The pathology of hematoma auris has given rise to extensive discussion. The views are various, and often quite contradictory. Hun describes it more especially as an effusion of blood or serum between the cartilage and perichondrium—the cavity being of perfectly smooth surfaces,—and that the lesion is peculiar to the insane.

Virchow, however, with such observers as Meyers, Gudden, Poljak, and Haupt, claim that it is by no means a pathological lesion of insanity, but that the surroundings of the insane and the debilitated condition which so generally accompanies insanity, are the real causes for its so frequent occurrence among that class of individuals.

These observers state that in the beginning there occurs, in one or more places, a degeneration or softening of the cartilage. At these spots a gelatinous material is deposited. During this metamorphosis of tissue there are formed new blood-vessels. They arise from the perichondrium or from those vessels that supply the softened spots in the cartilage. These recently formed capillaries are comparatively of good size. Their walls are thin and abound with numerous nuclei. At the same time, then, it is noticed that while the softening of the cartilage is taking place, the perichondrium is being supplied with granulation tissue.

It has been discovered, however, that practically this same change goes on in the cartilage and perichondrium of the auricle with those who are mentally sane.

This has caused the more recent observers to contend, therefore, that hematoma auris occurs more frequently among the mentally insane, simply because as a class they are below par as regards nutrition.

The characteristic phenomenon of hematoma auris, namely, the comparatively large and rather sudden escape of blood between the cartilage and perichondrium, or into the substance of the cartilage itself, is explained by the fact that the walls of the newly formed capillaries are very thin and yield readily to pressure.

Thus it can easily be understood how a very trifling exciting cause, such as a slight blow, or even the reflex congestion following some mental emotion, could rupture one or more of these delicate vessels. On account of the pathological changes which go on in the cartilage of a typical case of hematoma auris, it has very properly been suggested, I think, that the disease under discussion be called chondromalacosis, which really indicates the essential nature of the affection.

TREATMENT.

The treatment of hematoma auris is by no means agreed upon, nor is it, in a large class of patients, satisfactory.

Most physicians in charge of those mentally insane, even to-day, are in favor of non-interference, while aurists do not hold so generally to this idea. The tendency in this affection is to a spontaneous rupture of the blood tumor, or to a gradual absorption of the fluid. Many claim, moreover, that where the rupture occurs spontaneously, or especially by the surgeon's aid, the auricle is left in a more deformed condition than is the case when the fluid tumor is gradually absorbed. On the other hand, aurists, as a rule, assert that considerable suffering and inconvenience can be avoided and better results obtained by discriminate and intelligent interference.

I have seen some excellent results follow what we might term "the passive" as well as "the active" or surgical treatment. On the contrary, I have seen some very badly distorted and deformed auricles resulting from non-interference, which it does seem were unnecessarily in this condition.

I appreciate the fact that with the insane hematoma auris is more liable to occur; yes, nearly always does occur, in those advanced and hopeless conditions of brain disease, such as dementia and chronic melancholia; hence, the mis-shapen ear is a secondary grievance. It is natural and only fair then, I believe, among the insane, to make some allowance for not interfering with the course of the disease.

This does not, however, seem to me the proper course to pursue for those of us who at least meet this affection among the mentally sane. In the beginning of the attack it would appear proper to make use of such external applications as would afford relief to the marked tension and pain in the auricle. It is, of course, desirable to prevent as little separation of the perichondrium from the cartilage as possible, thus affording the least amount of deformity in the auricle.

Dr. Gruber, of Vienna, is in favor of an early evacuation of the

effusion, and the application of pressure to insure union in the walls of the cavity which contained the blood. He uses a trocar if the blood is still fluid, but if it is coagulated he incises the tumor and removes the clot. Massage has been recommended by a few authorities, but the results do not seem to warrant such a procedure. In case incision is made, the practice of using tents to keep the wound open, at least for any length of time, should be avoided, because the secretions have in some such cases become sort of sero-purulent and chronic. Again, when incision of the tumor is practised, and it is supposed the softening of the cartilage has not ceased, it is advisable to mop out the cavity with compound tincture of iodine before applying gentle pressure. The case of hematoma auris from which the plaster-paris cast was taken, which I offer you for inspection this evening, was treated by the writer with iodine and continued pressure. The result was very satisfactory, for only the slightest deformity remained. Many phases of this subject I have purposely omitted, presenting only such as seemed most salient and suggestive.

334 PEARL STREET.

THE MUSCLES OF THE FORE-ARM.

By A. L. BENEDICT, M. D., Buffalo, N. Y.

THE accompanying table and generalizations concerning the muscles of the fore-arm are the result of anatomical studies, both before and since graduation. Several of my students have found them a help, and, on that account, I offer them to others with the hope that they may serve to render less chaotic the mental picture of this important region. No originality is claimed, except for some phases of the presentation of the subject; nor is it expected that all the difficulties attending the study of the anatomy of these muscles will be removed.

Of the nineteen muscles of the fore-arm—two pronate the radius; two supinate the radius; three flex the hand; three extend the hand; three flex the fingers and thumb; three extend the fingers; three extend the thumb; — eight anterior; eleven posterior.

Both the anterior and the posterior group may be divided into superficial and deep layers. At the upper part of the fore-arm, the flexor sublimis forms an intermediate layer.

The course of the superficial muscles may be represented by lines radiating from the internal and the external condyle of the humerus along the front and the back of the fore-arm, respectively.

With the exception of the supinator longus and the extensor carpi radialis longior, the superficial muscles arise, at least in part, from a condyle by a common tendon.

One supinator and one pronator are superficial and lead the lists of superficial muscles, one supinator and one pronator are deep and have no analogy with other deep muscles. With the necessary exceptions of the pronator quadratus and the supinator brevis, all deep muscles arise from shaft and interosseous membrane.

At the inner (ulnar) side of the fore-arm, the anterior and posterior groups are separated by the attachment of both the extensor and the flexor carpi ulnaris to the posterior border of the ulna. At the outer (radial side), there is no marked separation, and the supinator longus overlaps nearly half of the front of the fore-arm.

Insertion.—The pronators and supinators, of course, are inserted into the radius. The flexors and extensors of the hand are inserted into the bases of metacarpal bones, except the palmaris longus. The flexor carpi ulnaris is also attached to the pisiform bone.

The extensors of the fingers are inserted by middle slips into the bases of the second phalanges, and by lateral slips, which unite, into the bases of the distal phalanges.

The flexor *profundus* is the flexor *perforans*, and it is inserted into the *end phalanges*. Similarly, the flexor longus pollicis is inserted into the distal phalanx of the thumb. This is in accordance with a general rule that a "long" muscle is long at both ends, *i. e.*, it arises higher and it is inserted lower than the corresponding "short" muscle.

The extensor indices and the extensor minimi digiti are inserted in common with the corresponding tendons of the extensor communis digitorum.

The extensors of the thumb are inserted into the bases of the bones from which they are named. The extensor ossis metacarpi, which is inserted into the largest bone, has the largest origin, *i. e.*, from both bones of the fore-arm. The extensor primi internodii, whose tendon runs with that of the extensor ossis metacarpi, on the radial side of the "anatomical snuff box," arises from the radius. The extensor secundi internodii, whose tendon forms the ulnar side of the "snuff box," arises from the ulna.

The proximal phalanges of the fingers have no muscular insertions, except from the small muscles of the hand, and, therefore, they are flexed and extended only by the muscles which are inserted into the second and third phalanges. Hence, the rule to amputate the entire finger if the base of the second phalanx cannot be saved. An exception is sometimes made in the case of the index.

	ORIGIN.	ANTERIOR GROUP.	INSERTION.
Pronator Radii Teres	(1) Internal Condyle by common tendon.	(2) Inner side of Coronoid.	Radius. Rough ridge on middle of outer border.
Flexor Carpi Radialis	(1) Fascia and Inter-muscular septa.	(2) Upper $\frac{2}{3}$ post border of ulna and septum.	Metacarpal. Base of 2d. Palmar fascia.
Flexor Carpi Ulnaris	(1) "	(3) Oblique line of radius.	Metacarpal. Base of 5th and Pisiform.
Flexor Sublimis Dig.			2d. Phalanges of 4 fingers.
Flexor Profundus Dig.		" Upper $\frac{2}{3}$ shaft of ulna { and interos mem. }	3d. " " "
Flexor Longus Pol.		" " " radius " " "	2d. Phalanx of thumb.
Pronator Radii Quad.	Deep.	Lower $\frac{1}{3}$ of ant. border of ulna.	Radius. Lower $\frac{1}{3}$ of outer border.
		POSTERIOR GROUP.	
Supinator Radii Longa.	Upper $\frac{2}{3}$ Ext. condyloid ridge	{ and intermusc. septum }	Radius. Base of styloid process.
Ext. Carpi Rad. Long.	Lower $\frac{1}{3}$ " "	" " " "	Metacarpal. Base of 2d.
" " Brev.	{ External Condyle by Common Tendon }	" " " "	" " " 3d.
Ext. Communis Dig.	" "	" " " "	2d and 3d Phalanges of 4 fingers.
Ext. Minimi Dig.	" "	" " " "	" " " little finger.
Ext. Carpi Ulnaris.	" "	" " " "	Metacarpal. Base of 5th.
Supinator Radii Brev.	Ext. condyle, Ext. lat. and orbic ligaments, oblique line of ulna.		Radius. } Inner surf. of neck, outer surf. of bicip. tuberosity, oblique
Oasis Metac. Pol.	Posterior surface of shaft of radius and ulna { and interos. mem. }		Base of Metacarpal of thumb. [line.
Ext. Primi Intern. Pol.	" " " radius	" " " "	" " 1st Phalanx " "
" " Secundi Intern. Pol.	" " " "	" " " "	" " 2d " "
" " " " "	" " " "	" " " "	2d and 3d Phalanges of index.

Society Proceedings.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED meeting, September 10, 1890.

The Vice-President, JOHN B. ROBERTS, M. D., in the chair.

Dr. BENJAMIN T. SHIMWELL read a paper on

A NEW METHOD OF DELIVERING THE FETAL HEAD.

Nature's manner of delivering the fetal head has been followed by obstetricians from time immemorial, recognizing the fact that the occiput is born under the symphysis pubis in normal labor. The face and chin stretch the perineal body, then force their way out, requiring an especial amount of care to prevent tearing of this tissue. The extent of injury to the pelvic floor is not properly appreciated; if the superficial tissue of the perineum is safe, the attendant congratulates himself on his possible skill; or, if aware of deeper injury, feels grateful that no apparent injury is shown to the watchful eyes of the nurse or patient's friends.

Thus do thousands get out of the confinement-bed ruined in health, carrying into the future injuries that must of necessity bring ill results. Various plans have been suggested to support and accommodate the perineal body to the oncoming head.

It is strange how often the anatomical construction of the perineum is overlooked, and considered merely as a space-filler. It is by this that so much injury is done. The gynecologist's specialty lives by these results.

These are the reasons, hastened probably by experience gained in the above manner, that has induced me to write this paper. The theory that will be advanced, backed by my application of it in a great number of cases, is evidently new; if not, it has not come to my knowledge by reading or otherwise. The advantage of this method is the saving of the pelvic floor from injury, either superficial or deep. No attempt is made to show expedition, but a modification of the ordinary method of labor changing the direction of the impinging force.

Naegele says that seventy out of every one hundred vertex presentations are in the first position, the other thirty are occiput to right and posterior. The remaining positions are exceedingly rare.

When the head presents in the first position, the body of the

child must not be overlooked. The back of the child must present to the front and left, the chest to the back and right; therefore, at right angles with the vertex presentation of the head at the superior strait. The important point in this theory is the rotation of the head to the symphysis pubis. The manner of rotation of the head is mooted. Pajot claims that the shoulders participate in the rotation, but contradicts himself when he further says: "That it is above all the shape of the child's head which decides the character of the movement;" also, "That the occiput will, therefore, be carried forward less on account of the direction of the forces which impel it, than because of the necessity for accommodation of the cephalic surfaces to the pelvic surfaces." All writers admit that after expulsion of the head occurs restitution takes place; that in a case of first position, after the head is delivered, the head turns with its occiput to the left thigh — that is, in the direction that the head presents at the superior strait; this is an untwisting of the neck.

Gerdy claims that this is "an external expression of a movement of the shoulders within the pelvis, by which the biacromial diameter passes from the transverse to the antero-posterior diameter, the head following the internal rotation." The folly of this assertion is on its surface. The head is free and the neck and body are constricted by the vagina and uterus, and if rotation does take place, can we overlook the anatomical relation and action of the vertebræ? Would not the weight of the head allow of the rotation internal without its external manifestations?

Penrose (Hirst, Vol. I., p. 571) says: "While the head has rotated, the body of the child, still in the cavity of the uterus, has been tightly grasped by the firmly contracting walls of the uterus, and has not participated in the movements of the head; hence the shoulders are still oblique at the superior strait, consequently the neck of the child is twisted." The latter theory, according to my experience, is the true one. The fact of the anatomical construction of the cervical vertebræ of the child cannot be overlooked. This arrangement allows of a rotation of one-fourth of its circumference to take place without injury to the spinal cord. Therefore, if Pajot's theory of the accommodation of the cephalic surfaces to the pelvic surfaces, rather than the application of the force, is true, then it can be seen that rotation of the head is possible without the shoulders. Then, again, the head is not free to wobble around the pelvis when it has reached such a condition of flexion; neither is the neck a rigid body depending on the shoulders for its posi-

tion. If the theory of shoulder rotation is so, then nature's method is superfluous; for, why should the biacromial diameter be changed from its oblique position, which is nearer the antero-posterior diameter, to the transverse, then rotate back again beyond its former position to the antero-posterior.

Playfair believes in partial rotation.

Believing, then, that the shoulders still maintain their oblique position through all the stages of the delivery of the head, what occurs when rotation brings the occiput directly antero-posterior? This has been accomplished by the rotation mentioned of the atlas on the axis vertebra to one-fourth of its circumference; this having occurred, the delivery of the head takes place, then immediately external rotation or restitution occurs, that is, the neck untwists.

The outlet of the female pelvis is four inches antero-posterior and transverse. The antero-posterior is possibly increased a half inch by extension of the coccyx. These measurements are decreased by the soft tissues; this is more marked in the antero-posterior by the rectum and perineal body. As the head in the last act of delivery begins to extend, we have presenting the cervico-frontal diameter, which is four inches; this has to pass through a space that is but four inches, possibly four and a half inches, lessened by the perineal body, which is at this stage excessively stretched and attenuated. As the safety of the perineum is an exceedingly important matter, it occurred to me that this might be accomplished by lessening the size of the impinging body and transferring the extending head into another direction. It is the nose and chin that rupture the pelvic floor; therefore, if the direction of this force can be changed to some other point than the junction of the levator ani muscle, it can be easily seen how injury to this muscle can be prevented.

When the labor has reached this stage, I place the woman across the bed on her back, knees well drawn up, then compel her to breathe with the mouth wide open to prevent bearing down. As the head presents in the oblique direction and to reach the antero-posterior diameter it rotates, twisting the neck, the first step in the method is to re-establish the direction of the first impingement; this is not done until the cervico-frontal diameter is reached; *this must be complete*, then forcing the head into extreme flexion by grasping the presenting occiput by the hand (in non-instrumental labors), I begin my rotation; the first step is to untwist the neck; this accomplished, the head presents cervico-frontal to the left

anterior. I then take advantage of the same anatomical construction of the cervical vertebræ that allows of the normal rotation, and rotate one-fourth in the opposite direction, that is, to the left. The cervico-frontal is then transverse, the neck lying on the labia of the left side, the forehead beginning to engage the soft tissues of the right labia. What is now presenting to the antero-posterior diameter, or, what is more important, to the perineum? The biparietal diameter, which measures three and one-half inches, therefore less tension on the perineum. The possibility of delivering the head in the transverse diameter has been questioned. The articulation of the head to the spinal column is wisely arranged; if no other object than birth was intended, it has well served its purpose. The diameters of the extending face are those of a right-angle triangle, the hypotenuse of which is four inches, the perpendicular three inches, the base two and four-fifths inches. The mechanical advantage of this is apparent. If the measurements had been those of a triangle, the impossibility of delivery is easily seen, the head could not be born as long as the perineum existed. The sweep of the extending head would be the same at the chin as at the forehead, and the perineum would be torn in every case and in every succeeding labor; but the measurements are those of a right-angle triangle, and of a necessity the chin must recede when complete extension takes place; so when extension is made in the transverse diameter of the inferior strait, the chin does not impinge on the ramus of the ischium.

Having got the head into this position, I begin the last stage of the delivery of the head. The head has been all this time in extreme flexion, then extension is performed, the soft tissues of the labia push aside, and nose follows on forehead, chin on nose; delivery is complete, and the pelvic floor is safe. The head then untwists to its normal position.

DISCUSSION :

Dr. E. E. MONTGOMERY: I think that the members of the Society are greatly indebted to Dr. Shimwell for the graphic presentation of this method of dealing with the delivery of the head and effort to save the perineum. This certainly is a violation of that old principle which has been handed down the ages that "meddlesome midwifery is bad." When we consider that all progress in obstetrics and every step in advancement has been in violation of this principle, this thought may not be considered an objection to this procedure, which certainly seems to be one which should be serviceable. But, not having had experience

myself, I am unable to say more than these few words in commendation of it.

Dr. J. M. BALDY.—It seems to me that the remarks of Dr. Montgomery, in regard to meddlesome midwifery, are true as regards pathological processes, but not as regards physiological processes. Certain it is that in almost everything which we have attempted to interfere with physiological processes, we have found that they have been carried on a great deal better by nature herself than by any so-called improvement that we have made on her. If nature had meant that the head should be delivered in the transverse diameter of the outlet, she would have given us some indication of such desire. On the contrary, she has shown us very clearly and distinctly that the head was to be delivered in the antero-posterior diameter. It is probable that the head can be delivered in the transverse diameter, as Dr. Shimwell has pointed out, if all the measurements are of average size; but all of us know perfectly well that it is the exceptional head that we come across, and not the typical head. Many of the heads are large, and the higher we get in the stage of civilization the larger the head. The normal head may go through, but I doubt not that Dr. Shimwell will run across many cases that he will not be able to deliver in the transverse diameter. Unless the head will pass easily, we have here no room for extension of the outlet. It is a fixed quantity bound by bony walls—the ramus of the ischium on both sides—and there can be no distention. On the contrary, in the natural methods of delivery we have free room for extension taking place through the perineal body and the soft part of the lower part of the pelvis. Now, it may be that there is danger to the levator ani muscles from over-distention, but at the same time I conceive, and it has been my experience, that the danger to these muscles is greater in proportion to the amount of interference we give to the perineum. In other words, we have here a hard body starting from a given point and progressing at a certain angle to a certain point at which it meets a plane of resistance, that plane of resistance being the soft parts of the pelvic floor, and, if you will, principally the levator ani muscles. There is a well-known physical law, that any body moving in a given direction and meeting with an obstacle, will be deflected at a certain angle. We have this occurring in delivery of the head. The head comes down and meets a resistance, which, although not a fixed resistance, is sufficient to cause deflection in the line of least resistance. This line of least resistance is the opening of the vulva. If resistance is given to the head at that point, the head is prevented from bulging through the vulvar orifice, and, the *vis a tergo* being still active, must be spent at some place, and that place is at the point of contact of the head with the pelvic floor. Taking the head, which is bulging the perineum and presenting at the vulva, we hold it back by pressure on the perineum, or by some other method; then we are going

to have the greater part of the *vis a tergo* exerted at this one point. These soft tissues of the pelvic floor are capable of yielding to a certain point, and, when they come to that point, they are going to give, and there will be a tear of the levator ani muscles and the other tissues involved. This is where, I believe, the vast majority of tears of the perineum come in. All instructors teach that the head should be held back in some way or other, so that the vulvar orifice is not allowed to expand and the head protrude, as nature intended; and by this misapplied force we bring about the accident we are trying to avoid. I have found in the cases in which I allowed nature to take her course almost entirely, keeping the fingers from the head and perineum, excepting to make slight pressure and lift the head up against the pubic arch, that they have done better and I have had fewer tears, and those that have taken place have been of a minor degree as compared with those where I tried to prevent injury by supporting the perineum. Any support of the perineum whatever is pernicious. I believe that all the teachers and all the books are at fault in that respect. Nature did not mean to have the head held back, and have the whole force spent on one part, when we have the elasticity of all the soft parts well anchored, so as to yield and to give room for the head to pass. Supporting the perineum prevents the proper stretching of these tissues, and prevents any good they may do in bulging the perineum and forcing the vulvar orifice open.

Dr. SHIMWELL.—I am exceedingly sorry that some of my friends who have used this method successfully have not spoken. Dr. Baldy has raised the objection that a large head could not be born transversely, but the same objection applies to the antero-posterior position as well. He overlooks the fact, demonstrated by the mathematical figure, that we gain, as the chin is delivered, a fraction over one and a quarter inches. The head is born without impinging on the soft tissues of the pelvis.

I have tried this method successfully for a year and a half, both in primiparæ and in multiparæ. I have used it both in cases terminated without instruments and in those where the forceps have been required on account of loss of tone or from malformation on the part of the head or of the pelvic outlet.

In regard to nature—nature is not always a good worker. If so, why should we have a disproportion between the head and the pelvis? The outlet should be made equal to the head. With regard to the increase in the size of the head with advancing civilization, I know that; but is the pelvis unchanged? Is it not rather lessened? Has it not changed its size and shape?

The points advanced are, I think, no argument against the method. It is a safe method; it is an easy method; and the delivery is accomplished with perfect safety to the child and to the mother.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

From The Canadian Practitioner.

THE annual meeting of the American Association of Obstetricians and Gynecologists took place in Philadelphia, on the 16th, 17th, and 18th of September, 1890. This society has for its object the discussion of the kindred subjects of obstetrics, diseases of women, and abdominal surgery. The first portion of the programme was confined to obstetrical subjects, and the remainder to gynecology and abdominal surgery, in relation to the new advances in the treatment of obstruction of the ureter, intestinal diseases, diseases of the gall bladder, and peritonitis. The chair was taken by the president, Dr. E. E. Montgomery, of Philadelphia. The very efficient secretary, Dr. W. W. Potter, of Buffalo, was in his place, and to his faultless arrangements much of the success of the meeting was due. Everything proceeded with clock-like regularity. Among those present, memory serves to mention the following: Drs. E. E. Montgomery, J. Price, Baldy, and Hoffman, Philadelphia; Dr. W. W. Potter, Buffalo; Dr. Robé, Baltimore; Drs. Vander Veer and Townsend, Albany; Drs. A. H. Wright and J. F. W. Ross, Toronto; Drs. Reed and Hall, Cincinnati; Dr. Davis, Birmingham, Ala.; Dr. Seymour, Troy, N. Y.; Dr. Werder, Pittsburg, Pa.; and others.

The discussions on many important matters connected with abdominal surgery were especially valuable. Dr. Vander Veer, with commendable courage, read reports of some very interesting cases, on which he invited criticism. The paper was not, as many papers are, a record of easy successes or of difficult cases with successful recoveries, but a record, faithfully prepared, of cases operated upon as a last resort after many delays, some with fatal termination, some with successful termination, and some with partially successful termination. One case recorded, of artificially-established intestinal anastomosis, is an addition to the records of the history of intestinal surgery that should encourage other workers in the same field. The patient died subsequently, but the intestines were found completely united, although a contraction had occurred at the artificial opening. If any one is sceptical as to the kind of union that will occur between the ends of resected intestine, he has but to visit the Army Medical Museum in Washington, and examine the specimen presented by Dr. Halstead, now of Johns Hopkins

Hospital. Union is so complete that the scar cannot be discovered except by most careful examination.

Another paper of particular interest was that presented by Dr. Hall, of Cincinnati, on removal of an impacted calculus from the ureter by combined abdominal and lumbar incision. The stone, after giving rise to symptoms of paroxysmal pain for three years, was discovered after making an exploratory incision, and was removed through secondary incision in the loin. The point of greatest interest was the cause of the pain. The stone was bean-shaped, and at the hilum a small slit existed through which, when clear and free from mucus, the urine trickled, but through which the urine could not find its way if blocked. This blocked condition produced a distention of the ureter and pelvis above the obstruction, and gave rise to the pain.

The specimens shown by Dr. Joseph Price were of very great interest. Myomata sloughing, as a result of electrolytic puncture, were shown. Dr. Price showed many specimens and plates of pyosalpinx, matted ovaries and tubes, from patients in whose pelves electricity had been given a fair trial by the most skilled electrical operators. He thought that if these electricians knew more of gynecology and less of electricity, the patients would be better off. A veil of mystery had been thrown around the use of electricity, and before a man was looked upon as fit to use it he must spend half a lifetime in his preliminary education. The general consensus of opinion was that the results of electrical treatment were disappointing, and that the cases came into the hands of the abdominal surgeon eventually; that electricity is a good caustic; that it will temporarily relieve hemorrhage in some cases of uterine fibroids; that it is useless in tubal disease or disease of the ovaries, or in ectopic gestation. As to its power of relieving pelvic pain, not much was said. Many reported results of the use of electricity were useless, owing to the impossibility of making a correct diagnosis without opening the abdomen. A supposititious diagnosis may be made, but it is not and cannot be verified without exploratory operation. To exemplify this point, Dr. Price showed a specimen removed before many of the members in the forenoon. He thought the woman had had a miscarriage and was suffering from puerperal pyosalpinx. He would defy any member present to diagnosticate the case even now with the specimen in his hand. Was it pyosalpinx or was it tubal pregnancy? He then opened it with a scalpel and it proved to be a tubal pregnancy. The fetus was easily made out.

He held that Tait's idea of rupture into the broad ligament was not correct. He had seen many cases (and the one just shown proved the fact) in which no rupture had taken place into the broad ligament, but the tube had simply gone on dilating as it does in pyosalpinx, hematosalpinx, and hydrosalpinx.

A discussion of the supposed virtues of the Staffordshire knot took place, a case having been mentioned in which hemorrhage had taken place after the most careful use of the knot. Dr. Price said that he had long since given up using it, and had returned to the simple old knot used by many celebrated ovariologists of the past. The simple transfixion, crossing of the ligatures, and tying in halves, would not allow bleeding any more than any other kind of knot. It was not so much the knot as the man who tied it.

There can be no doubt that hemorrhage may occur after using any kind of knot, no matter how well applied. All of the best operators have had this experience.

The question of drainage after abdominal operations was discussed. Some thought drainage should be used in every case; others that it should be used very seldom. The general weight of opinion seemed to be that drainage should be used whenever the abdomen was washed out, where there was danger of subsequent hemorrhage from adhesions, or a thick pedicle where there was much handling of the peritoneum.

The question of the necessity of drainage after washing out a tuberculous or an inflamed peritoneum was not discussed.

The wonderful record of Dr. Joseph Price, of twenty-six consecutive abdominal hysterectomies without a death, was presented to the meeting in an informal way.

The question of the advisability of performing vaginal hysterectomy for cancer was discussed, and opinion still remains divided. The statistics on both sides have not yet been collated to the satisfaction of those holding neutral ground. Many are waiting to be convinced. The main questions seem to be: 1. Do the cases live longer after (*a*) vaginal hysterectomy, (*b*) after high or low amputation of the cervix, or (*c*) after being left practically alone, or occasionally cauterized to relieve the hemorrhage?

2. Is the suffering greater up to the time of death (*a*) if they are simply occasionally cauterized; (*b*) if the disease returns after vaginal hysterectomy; or (*c*) if the disease returns after amputation of the cervix?

3. In how many cases can we be sure (*a*) that if the uterus is

removed, that surrounding structures are not already affected : (b) that if the cervix is removed, we have not already a nodule of disease in the fundus ?

These points require consideration, and were brought up in the discussion, but were not satisfactorily answered owing to the limited data from which to draw conclusions. If these questions could be answered by the collated cases of Tait, who is opposed to any operation ; of Leopold, the ardent advocate of the operation ; and of Van de Warker, the advocate of high amputation, and discussed by these surgeons at an international congress, a conclusion might be arrived at satisfactory to all concerned.

The treatment advised for gunshot wounds or stabs of the abdomen was immediate exploration by abdominal section. One case was cited in which a box-car at a railway siding was used as an operating room, the damaged intestines were immediately repaired, and the boy made an excellent recovery.

Dr. M. Price related a remarkable case of gunshot wound. The ball traversed the liver, injured the intestines, and went through the kidney. He repaired the intestines, resected the liver, and, with the exception of a small abscess in the kidney, the girl made a good recovery.

Dr. E. E. Montgomery, in presenting a specimen of extremely early ectopic gestation removed by operation, took occasion to state that he had altered the views expressed by him at a previous meeting regarding the advisability of using electricity during the early months of ectopic gestation. He knew from subsequent experience that it was a useless agent in such cases.

The social features of the meeting were very enjoyable. Dr. E. E. Montgomery received the Fellows at his residence on the evening of Tuesday, the 16th. A cordial invitation was extended to the Fellows to be present at a reception given by Dr. Willard, at the Art Club, to the Fellows of the Orthopedic Association. On Wednesday evening, a sumptuous banquet was given to the Fellows by the Obstetrical Society of Philadelphia. A most enjoyable evening was spent. Dr. Parish presided.

On Thursday, the newly-elected president, Dr. Adam H. Wright, of Toronto, took the chair, and, after a few appropriate remarks, adjourned the meeting *sine die*. The members returned home, to the north, south, east, and west, to gather another harvest for the next meeting, a year hence.

The place of meeting has not yet been decided upon, but I feel sure

that if the executive committee could be induced to select Toronto, the profession at large would make their visit so pleasant that they would be willing to return to us at no distant date.

Looking critically over the proceedings, one might justly say that, while a few of the papers were not up to the average, most of them were of a high order, and evoked discussions equal to any discussions I have ever heard, either in the American Gynecological Society, British Gynecological Society, or those we have read from the transactions of other special societies. We were particularly struck with the results obtained in abdominal surgery in all parts of this continent. Western, northern, and southern people need go no longer to New York to have their abdomens opened, because they can have them operated upon as well, if not better, with every comfort, and without incurring so much expense, much nearer home.

J. F. W. R.

VIRGINIA MEDICAL SOCIETY.

ROCKBRIDGE, ALUM SPRINGS.

MEETING, September 4th.

Dr. EDWIN RICKETTS, of Cincinnati, read a paper on Early Exploratory Incision as an Aid to the Diagnosis of some Surgical Diseases of the Abdominal Cavity.

He had found it difficult in many cases to make a diagnosis previous to exploratory incision.

To open the abdomen was easy enough, but afterwards to do *always* the best thing and that *promptly*, knowing when to end at exploration, bearing in mind that half-completed surgical procedures are *rarely ever excusable*, these are of greatest consideration.

He did not deny that a diagnosis cannot be made previous to an incision in some cases, but in a majority we cannot make out with any degree of certainty until, "Thomas-like," we first *see* and *feel* the condition present.

He claimed that the one from the outside that is always sure of what is on the inside is the one with his *occasional* operations is placed in a humiliating attitude before his guests, and is liable to attempt the completion of an operation that may be *wholly unwarrantable*. The undue conservative physician, with his free use of opiates, has grave responsibilities, for the reason that his prompt efforts for the relief of pain too often postpones the recognition of needed surgical interference.

He reports briefly eleven cases, coming under his observation, where exploratory incision was necessary to diagnosis.

Progress in Medical Science.

PHYSIOLOGICAL CHEMISTRY.

Under the Charge of JOHN A. MILLER, A. M., PH. D.,

Professor of Medical Chemistry and Toxicology at the Medical Department of the Niagara University.

A PTOMAINE EXTRACTED FROM URINE IN A CASE OF "MUMPS." By A. B. Griffiths, (*Chem. News*, 61, 87; *Jour. Anal. Chem.*, IV., 351).

In the case referred to, the kidneys were involved, and an alkaloid was extracted by what is called the "ether tartaric acid" or Luff method.

The alkaloid extracted in a case where the parotid and sub-maxillary glands were both affected, crystallized in white prismatic needles, soluble in water, ether and chloroform. It had a neutral reaction and a slightly bitter taste, and gave precipitates with the general reagents for alkaloids.

The analysis gave results corresponding to the formula:



From its decomposition products, possibly, it may be propylglycocyanine.

This new animal alkaloid is poisonous. Administered to a cat it produced nervous excitement, cessation of the salivary flow, convulsions and death. The alkaloid is not found in normal urines, and the process of its formation is a matter of conjecture.

NOTE ON LEAD POISONING BY CARBONATED BEVERAGES. By D. Woodman, (*Jour. Am. Chem. Soc.*, 11, 99; *Jour. Anal. Chem.*, IV., 353).

Attention is called to several cases of poisoning caused by the use of carbonated beverages. The stopper of the bottle was examined and found to consist of a rubber washer, held in place by a metal disk. An analysis of the stopper gave 46 per cent. of lead and 52.2 per cent. of tin.

An analysis of several samples of soda water was made, and they were found to contain from 0.33 to 0.63 grains of lead per gallon. The bottles were kept lying on their sides for one week before opening.

THE PERTIC AND DIASTATIC FERMENTS OF MICRO-ORGANISMS. By Dr. Claudio Fermi, (*Archiv. für Hygiene*, B. 10, 1890; *Jour. Anal. Chem.*, IV., 353).

The following germs produce peptic ferments which dissolve gelatin and fibrin :

- | | |
|-------------------------------------|-----------------------------------|
| 1. Anthrax bacillus. | 7. <i>B. pyocyaneus</i> . |
| 2. Koch's vibrio. | 8. Cheese spirillum. |
| 3. Finkler-Prior vibrio. | 9. Miller's bacillus. |
| 4. <i>Micrococcus prodigiosus</i> . | 10. <i>B. megaterium</i> . |
| 5. <i>Micrococcus ascoformis</i> . | 11. Hay bacillus. |
| 6. <i>Bacillus ramosus</i> . | 12. <i>Tricophyton tonsurum</i> . |

Ferments were isolated from cultures of these germs.

Bacteria which do not liquefy gelatin, produce no peptic ferment.

These ferments were compared with pepsin, trypsin, and papain with the following results :

(1.) Temperature necessary to destroy ferment varies, viz. :

- | | |
|--------------------------------|-------|
| 1. <i>M. prodigiosus</i> | 55°C. |
| 2. <i>B. pyocyaneus</i> | 60°C. |
| 3. <i>B. anthracis</i> | 65°C. |
| 4. Koch's vibrio | 65°C. |
| 5. Finkler-Prior | 70°C. |

(2.) A temperature of 65° destroys the action of pepsin.

(3.) Trypsin heated to 50° no longer digests fibrin, and is without action on gelatin when heated to 60°.

(4.) The ferment of Finkler-Prior and trypsin are alike without effect on fibrin at +4°.

(5.) In presence of five per mille of hydrochloric acid, the ferments of Koch's vibrio, Finkler-Prior, *M. prodigiosus*, and *B. pyocyaneus*, are without action on fibrin, but still active with gelatin : under the same conditions trypsin does not act upon either fibrin or gelatin.

(6.) The ferment of anthrax is without action on gelatin in the presence of five per mille of hydrochloric acid.

(7.) Papain and Finkler-Prior ferment alike bear a dry heat of 120°-140°C. without being destroyed.

(8.) The presence of corrosive sublimate one per mille, of salicylic acid, saturated solution, and of carbolic acid five per mille, destroys the activity of the ferments of the cholera germ, the Finkler-Prior bacillus, *M. prodigiosus*, also of pepsin (salicylic acid excepted) and trypsin on fibrin.

(9.) Of fourteen bacterial ferments only five digest fibrin.

(10.) Egg-albumin, serum-albumin, and diphtheritic membrane are attacked with difficulty by the bacterial ferments.

(11.) Gelatin is acted upon much more readily than fibrin by both trypsin and the bacterial ferments.

(12.) None of the bacterial ferments act upon fibrin in the presence of hydrochloric acid.

The following germs produce very active diastatic ferments :

Anthrax.	Miller's bacillus.
Cholera.	B. ramosus.
Finkler-Prior.	B. Fitz.
Cheese spirillum.	B. tetrayenus.
B. megaterium.	
Hay bacillus.	

The following produce feeble diastatic ferments :

Feces bacillus.	Hay vibrio.
B. pyogenes fort.	Steph. cercus et flavus.
B. aceticus.	Pneumonia bacillus.
B. violanus.	Tricophyton tonsurum.
	Glanders vacillus.

The production of a diastatic ferment by the following is doubtful :

Rabbit septicemia.	B. diphtheriticus.
B. zopfi.	B. phosphorescens.
B. typhosus.	

Seven ferments were isolated, having the following properties :

(1.) A temperature of 37°C. favors the culture of the diastatic ferments. They are active, however, at +4° and at 50°.

(2.) Heating to 60° destroys the cholera ferment, and to 70° all the others.

(3.) They are not destroyed by a three per cent. solution of carbolic acid, a saturated solution of salicylic acid, and a ten per cent. soda solution, but they are enfeebled by hydrochloric acid five per mille.

(4.) Gum arabic, inulin, amygdalin, and salicin are not affected by bacterial ferments.

(5.) The starches are fermented by the following germs :

1. B. Fitz.	6. Cheese spirillum.
2. B. megaterium.	7. B. violaceus.
3. B. Miller.	8. B. pyog. fort.
4. Cholera germ.	9. B. tetrayenus.
5. Finkler-Prior.	

(6.) Hay bacillus and b. ramosus change starch into sugar without causing further fermentation.

(7.) Both peptic and diastatic ferments may be produced by one and the same germ.

POISONOUS PRODUCTS OF SAPOGENOUS INTESTINAL BACTERIA. By Bagiknsky and Startthagen, (*Berlin Klinische Wochens.*, No. 13, 1880; *Jour. Analy. Chem.*, IV., 358).

The white, liquefying bacillus, which is frequently found in the diarrheal stools of infants, was grown at 35°C. for ten days on sterilized broth made from horse flesh. A poisonous base was obtained, which agrees very closely with the one obtained by Brieger from meat, which had been undergoing ordinary putrefaction for four months. There was also obtained a poisonous peptone, which caused death in from forty-eight to seventy-two hours. Heated to 100°C. enfeebled this peptone, but did not wholly destroy its poisonous properties.

When grown in sterilized milk, this same germ does not produce the basic substance mentioned, but after keeping for three days at 35°C. the unfiltered milk is intensely poisonous. If the milk cultures be kept until complete coagulation takes place, the poisonous properties will be found to have disappeared. The peptone prepared from the milk seems to be quite different from that obtained from the meat cultures.

PROTEIDS OF LIVER AND KIDNEY CELLS. By W. D. Halliburton, (*Proc. Physiol. Soc.*, 1890, 7; *Jour. Chem. Soc.*, Sept., 1890).

The proteids obtained of these cells belong almost exclusively to the class of globulins. The nucleo-albumin, which was previously described in lymph cells, is absent from liver cells, but present in kidney cells. No evidence of true myosin or myosinogen is found in either, although portions of the flesh tissues are found to hasten the coagulation of salted blood plasma, and of hydrocele and pericardial fluids very considerably. This power is destroyed at a fairly low temperature, and attempts to prepare fibrin ferment from the cells by Schmidt's alcohol method failed.

IS FREE HEMOGLOBIN PRESENT IN THE BLOOD-PLASMA OF THE SPLENIC VEIN? By E. A. Schaefer, (*Proc. Physiol. Soc.*, 1890, 9-10; *Jour. Chem. Soc.*, September, 1890).

The observations were made for the purpose of testing the statements which occur in many text-books of physiology, (the origin of which appears to be obscure,) that the blood-plasma of the splenic vein normally contains free hemoglobin. The investigation, covering a period of two years, of the blood of a large number of

animals of different kinds, killed at various stages of digestion proved that free hemoglobin is normally absent both in the blood-plasma of the splenic vein and in that of arterial blood.

LECITHIN AND CHOLESTERIN IN RED BLOOD CORPUSCLES. By P. Manasse, (*Zeit. Physiol. Chem.*, 14-437; *Jour. Chem. Soc.*, September, 1890).

The cholesterin in the red corpuscles of the blood is identical with that obtained from gallstones. The corpuscles contain as a mean 0.151 per cent. of cholesterin. The lecithin is identical with that obtained from egg-yolk, brain, etc. The corpuscles contain as a mean 1.867 per cent. of lecithin.

PERNICIOUS ANEMIA. By W. Hunter, (*Brit. Med. Jour.*, 1890, II., 1-4, 81-85; *Jour. Chem. Soc.*, September, 1890).

A case of this disease is described with clinical details. The urine was normal in quantity, of low specific gravity, and contained as its principal pigment "pathological urobilin." Occasionally cells of renal origin, containing blood-pigment, were present. The urine contained *excess of iron*. The average secretion of iron in the urine in health is from three to five milligrams daily; in three cases of chlorosis it averaged 1.76 milligrams; in the present case it varied from 6.5 to 32.3 milligrams. The liver was found to be richer in iron than normal.

The opinion was formerly expressed that the destruction of the blood corpuscles, characteristic of the disease, which occurs in the portal circulation, and which is similar in essential characteristic to that produced by poisoning with toluylenediamine, is probably brought about by certain poisonous agents of a cadaveric nature absorbed from the intestinal tract. Special attention was, therefore, directed to the products of putrefaction in the urine. Estimation of the etherial hydrogen sulphates and their ratio to the normal sulphates showed that the absolute amount of putrefaction, as measured by that of the aromatic sulphates, was not increased; the normal ratio of the two classes of sulphates was, however, considerably altered, being 1:3 instead of the normal 1:10. Improvement in the patient's condition were coincident with the returns to the normal ratio.

It was further found that the urine contained a *ptomaine*, putrescine (tetramethylenediamine), a substance absent in the urine of health and that of most diseased conditions, but present in that of cystinuria and probably also in that of cases of cholera. In one specimen another diamine, which was not fully identified, was also

discovered. These diamines are not, however, markedly toxic, and they can hardly be considered the poisons that produce the blood-destruction, but their presence indicates the existence of certain special microorganisms in the alimentary tract, and, therefore, a condition more than any other favorable to the production of other and more poisonous alkaloids not yet discovered.

A further support to the supposition that the alimentary tract is the seat of the formation of the poison, was found in the fact that the gastro-intestinal mucous membrane was distinctly unhealthy in appearance, showing well-defined patches of inflammation, resembling those frequently seen in the kidney when that organ is the seat of localized infection with pathogenic microbes. The neighboring lymphatic glands were similarly affected.

NERVOUS DISEASES, INSANITY, AND BACTERIOLOGY.

Conducted by WILLIAM C. KRAUSS, M. D.

IN *Neurologisches Centralblatt* for May 15th. Dr. Minor, of Moscow, described a process whereby animal tissues, and especially those of the nervous system, may be hardened in from three to five days. Generally it requires from one to four months to harden tissues in Müller's fluid, before they can be cut. He subjects the tissues to the action of the positive pole in the Müller's fluid, and finds that after three to five days they are sufficiently hardened. Examined under the microscope, the sections were found so hardened. If subjected to the action of the negative pole, they become soft and doughy.

ON THE TRANSMISSIBILITY OF TUBERCULOSIS THROUGH MOUTH-PIECES OF MUSICAL INSTRUMENTS.—In the *Revue d'Hygiène*, for April, 1890, Dr. Maljean reported a case of tuberculosis, acquired by using a musical instrument formerly the property of a phthisical patient. To prove his assertion, he poured some sterilized water into the trumpet, allowed it to remain ten minutes, and injected two centimeters of the fluid into a guinea pig. After a short interval, the animal became tubercular and died.

In *The Medical Age*, of August 11th, Dr. V. C. Vaughan, of Ann Arbor, concludes an article on The Fundamental Factors in the Causation of the Infectious Diseases, as follows:

The agent which is most potent in the prevention of the infectious disease through the tissues is the blood. Germicidal proper-

ties of this fluid have been abundantly demonstrated; and they are not due to any formed elements, but reside, as has been shown by Buchner, in the proteids. Blood wholly freed from corpuscles and with its leucocytes destroyed by alternate freezing and thawing, still retains its germicidal properties. A healthy condition of the blood and lymph is, therefore, an important factor in the prevention of the infectious diseases.

But you are probably ready to ask: "Of what practical importance is all this?"

It has its practical bearings, and, in brief, they may be summed as follows:

1. All toxicogenic germs are dangerous when introduced in the body.
2. Filth may and does breed disease.
3. It is not necessary that milk should contain a specific germ in order to poison a child, or that a water should contain Eberth's bacillus in order that it may induce typhoid fever.
4. Wheresoever man builds for himself a habitation, and poisons the soil about him, and the water which he drinks, with his own excretions, there will be enteric fever.
5. A good digestion and a healthy gastric juice does aid in the prevention of disease.
6. We can still continue to treat consumption by good, generous feeding and constitutional treatment, without the risk of being denounced old-fogyish and unscientific in our practice. Such practice is more scientific and more successful than such fads as the rectal administration of hydrogen sulphide gas and inhalation of hot air, which have been imported in recent days from France and Germany.

Our fathers, who treated tuberculosis with cod-liver oil and recommended out-door exercise, but who carried no gas bags and knew nothing of the Weigert oven, were not such fools after all.

In conclusion, let us state that the germ is only one of the factors in the causation of the infectious diseases. The other factors are to be found in disordered digestion and impoverished blood.

SUCCESSFUL BRAIN GRAFTING.—W. G. Thompson, who has made numerous experiments in transplanting a piece of brain tissue from one side of an animal's brain to another, or from one animal's brain to another, says:

1. There is complete union, through organized connective tissue, of the contiguous portions of the two brains.

2. After seven weeks the cat's brain still maintained enough vitality to be distinctly recognized as brain tissue.

3. Brains of animals of two very different species were thus made to unite.

4. The pias of cat and dog present perfect union as well.

5. There is a sympathetic degeneration of the corresponding convolutions upon the opposite side of the dog's brain. For this curious fact I cannot account. I have never noticed it before, in as many as fifty operations upon this region of the brain of cats and dogs, although I have sometimes seen removal of a part of the occipital region result in extensive softening of the entire hemisphere of the same side. The opposite degeneration in this case may possibly be a mere coincidence ; if so, it is a very unusual and remarkable one. There was no meningitis to favor it.

6. There was descending secondary degeneration of the dog's brain on the side of the graft, as is usual in cases of simple excision of brain cortex ; hence the cat's cortex had not succeeded in acting as a nutrient center for the dog's brain. (The microscopic specimens, showing the line of union of the two brains, were shown to several competent microscopists, who indorsed their appearance as herein described, so that there can be no question of the accuracy of the observation.)

I think the main fact of this experiment—namely, that brain tissue has sufficient vitality to survive for seven weeks the operation of transplantation without wholly losing its identity as brain substance—suggests an interesting field for further research, and I have no doubt that other experimenters will be rewarded by investigating it.—*New York Medical Journal*.

THE INFLUENCE OF ELECTRICITY ON PROTOPLASM.

THE *American Microscopical Journal*, for August, 1890, contains the address of Dr. Fell, of this city, before the American Society of Microscopists, on the above subject. In it are found the results of microscopical examination of some of the tissues of a calf killed by electricity. The examination of the heart muscle, made by Professor S. H. Gage, of Cornell University, is as follows : In examining the calf-heart muscle sent me, I made sections, stained and mounted in balsam. As a criterion to guide me, the heart of a

calf, butchered in the ordinary way, was obtained, and preparations were taken from the same part of the heart of the two specimens and treated exactly alike. After comparing parallel preparations, no constant differences could be found. In the heart killed by electricity, the longitudinal striation of the muscle-cells was very clear, the fibrillæ seeming to be separated by a comparatively white, wide, clear line, and in the fibrillæ, the dark band was very marked, giving the appearance of a row of light and dark tubes. From the width of the inter-fibrillar light line the transverse striation was not so marked as the longitudinal. Later, the distinction broke down as similar, if not quite so marked, in the heart muscle of the butchered calf. The nuclei of the muscle-cells were scrutinized with the greatest care, but no difference could be discovered.

The result of the microscopical examination of the brain, made by Dr. Wm. C. Krauss, of Buffalo, N. Y., was as follows: The pia was non-adherent, pial vessels were somewhat injected, the brain substance was firm and resistant, not brittle, and no petechial extravasations were discovered on section. A slight discoloration of the pia and underlying brain substance, over the frontal and occipital lobes, was no doubt produced by the thermic action of the electric current.

The sections took on an indistinct diffused stain. The ganglion cells lacked that sharpness and clearness of outline generally found in normal brain tissues. As to the physical condition of the ganglion cells, there appeared to be no material change; nucleus cell, body and poles were in normal condition; the same was true of the vessels and neuroglia cells. No evidence of hemorrhage into the brain tissue could be discerned.

The peri-ganglionic spaces were found free and unobstructed. The result of the microscopic examination is, therefore, negative as far as the physical condition of the separate brain elements is concerned. Whether the diffused appearance of the sections can be attributed to some chemical change in the protoplasm, is left unanswered.

OPTHALMOSCOPIC EXAMINATION OF THE EYES OF THE HYPNOTIZED.

DRS. LUYS AND BACCHI, Members of the Paris Academy of Sciences, (*Centralblatt für Praktische Augenheilkunde*), say they have employed the ophthalmoscope for the examination of the

fundus of the eyes of hypnotized patients. Six women and three men were examined in the stadium of catalepsy, somnambulism, and in the condition of Foxination.

In catalepsy they observed a change in the pale color of the retina, the papillæ assumed a rose-red color, and the vessels were much enlarged. During the whole period of the cataleptic condition the hyperemia of the papillæ continued, the pupils were largely dilated and contracted slightly when exposed to bright light.

In Foxination the peculiar condition of hyperemia continued, as in catalepsy.

In the stadium of somnambulism there was little change in the appearance of the blood-vessels at the fundus: the papillæ being less intensely colored, and the pupils more mobile and sympathetic to light.

In catalepsy the eyes are immobile, whereas in somnambulism the eyes soon regain their mobility.

The ophthalmoscopic examination of a patient in the hypnotic condition has also a forensic interest, because the condition cannot be simulated, and provides a means to diagnose the hypnotic condition.

The authors conclude their investigation with the remark that in both conditions the physiological functions of the eye are increased and the acuity of vision more than normal. (?)

J. FALK.

NEW METHODS OF TREATMENT IN ERYSIPELAS.

1. **METHOD OF ROSENBACH.**—Consists in first washing with soap not only the affected part, but also surrounding healthy skin, then applying each day a solution of carbolic acid (five per cent.) dissolved in absolute alcohol. Results very brilliant, as regards both the progress of the malady and the febrile phenomena. The use of absolute alcohol by itself has also produced favorable results.

2. **METHOD OF NOLTI.**—The affected parts and surrounding skin are covered twice daily with mucilage of gum Arabic, mixed with from three to five per cent. of carbolic acid. Good results. Dr. Ebstein mixes the carbolic acid with vaselin.

3. **METHOD OF KOCH.**—By means of a soft brush we apply a thin and regular covering of the following pomade:

R—Creolin.....	gramme	1.00.
Iodoform	grammes	4.00.
Lanolin.....	grammes	10.00.

The parts are then covered with leaves of gutta-percha. This has given good results, especially in erysipelas of the face and head.

4. METHOD OF NUSSBAUM AND BRUNN.—Ichthyol, with or without collodion. Results favorable and very prompt.

5. METHOD OF HALLOPEAU.—A solution of one to twenty of salicylate of soda is soaked in a mask of several thicknesses of linen and applied over the parts, after which it is covered with rubber bands, to prevent evaporation. Relief almost immediate; cure in from three to five days.

6. METHOD OF HUETTER.—Injections of carbolic acid in the healthy skin, in doses of from ten to fifteen grammes, distributed in several punctures, at one or two centimeters from the edge of the affected parts, with the following solution, recently prepared :

R—Carbolic acid (pure)

Absolute alcohol.....	aa grammes	3.00.
Distilled water.....	grammes	94.00.

Very painful. Only applicable in severe cases of the head and face.

7. METHOD OF KRASKE.—Scarify the edges before application of the antiseptic substance. Dr. Lowenstein advises that the incision should be made exclusively in the healthy skin, after which the parts are enveloped with a solution of carbolic acid or sublimate.

8. METHOD OF WOLFLER.—Mechanical compression by means of adhesive plaster applied on the healthy skin on the borders of the affected parts, so as to completely surround them.—*Le Bulletin Médical*.

IODINE IN THE TREATMENT OF WARTS.—Given to adults, in doses of ten drops twice daily, the tincture of iodine has proved very successful in preventing the further development of warts and causing those already present to disappear. Dr. Imossi remarked, in the ten cases which had come under his observation, that the treatment produced striking emaciation, a fact which he has since turned to account in the treatment of obesity. He has succeeded in procuring a diminution of weight of about twelve pounds in three weeks.—*The London Medical Recorder*.

Correspondence.

DR. HAYD REPLIES TO J. P. AND J. H.

Editors Buffalo Medical and Surgical Journal :

I AM very pleased that J. P. and J. H. considered my letters of sufficient interest to answer them through the columns of your journal.

Yes, "a follower of the prophet" has returned to Buffalo, with his faith strengthened in the "teachings of his master," and better acquainted with the tenets of electro-therapeutics. Moreover, "he wandered to Mecca," as he felt that there was much for him to learn in this question of electricity—a subject which is engaging the attention and interest of many of the best men in the profession.

I object, when my learned correspondents say that surgeons are foremost in narrowing the usefulness of electricity, in view of the fact that many of the best operators of to-day are among the most earnest advocates of its employment. I need but refer to Keith, Sr., who says that all bloody operations for the relief of fibroids should be abandoned until electricity is first tried, so satisfactory and encouraging were the results in his hands. Sir Spencer Wells, and Playfair, endorse it in equally commendatory terms, as well as Savage, Noeggerath, Engelmann, Thomas, Mundé, Zweifel, La Torre, Delétang, Mann, Grandin, and many others. It seems to me that these men may lay just claim to the confidence of J. P. and J. H., and might be looked upon by them as "authorities in the diagnosis, pathology, and treatment of most of the conditions" which come under the care of the ordinary gynecologist. Whether Apostoli now advocates "electro-puncture in extra-uterine pregnancy,"—if he ever did, my authority being J. P. and J. H.,—does not lessen his ability as a diagnostician today. It seems to me that a well-educated man, who has enjoyed the privileges of a large clinic for a great many years, having treated over three thousand patients at his public dispensary alone, together with the experience derived from a large private practice, ought to be in a position to make a diagnosis satisfactory to even J. P. and J. H. His clinic has been honored by visits from England and Germany's most representative men, as well as many persons of position and reputation in our own country. These men return to their homes satisfied with his results, and use electricity in their own practices with satisfaction.

to themselves. That "these men create a disease, and then cure it, and juggle with pathological terms to mask a physiological variation," is absurd on the face of it. Perhaps J. P. and J. H. are men quite familiar with this juggling process, and use high-sounding platitudes and beautiful rhetoric to picture their own imaginations.

Yes, a great many fibroids are seen, and I think I can say in all fairness, more than one sees in any other clinic of the same size in Europe. This claim is not unreasonable, when we take into consideration that Dr. Apostoli was among the first to advocate electricity in the treatment of these growths. His clinic is situated in a large city, and has been supplied for years by the material of many interested confrères. True, many cases of fibroid require no treatment, and I have seen such cases, where no special symptoms were complained of, dismissed without treatment, and invited to return to the hospital when assistance might be required. The cases which I referred to in my letters, were those in which treatment was necessary to relieve the severe pain, dangerous and exhausting hemorrhages, and other pressure symptoms, which were complained of. These patients have been relieved, and, to all intent and purpose, cured, since they have required no treatment for a great many years, and have been enabled to do their work and enjoy themselves. They have been kept under observation, in that they present themselves at variable intervals at the clinic, in order that their condition may be noted. That J. P. and J. H. found anything in this to criticise, is beyond my power to explain or understand. These observations have been verified by other men, who, in their practices, have relieved the symptoms and have seen the tumors appreciably diminish in size and sometimes disappear under treatment.

I should have been particularly interested if J. P. and J. H. had given us their experiences with electricity, and had not in a general way abused the agent and the men who find it of service in their practice. Is not the reputation of these men whom I have named, and many others I shall be pleased to give, sufficiently honorable, and their practices sufficiently remunerative, to protect them from the charge of belonging to "that class who resort to Louisiana lottery schemes to influence their patients and gain their confidence and respect?" Perhaps J. P. and J. H. have been buoyed up in the belief that by throwing mud, in the shape of mean insinuation and petty slander, some might stick and thus make their argument more forcible. Let me admonish them that that kind of practice will

not settle these points, upon which the profession is in serious study. The wonderful ability which they possess, as evidenced by their readiness in criticism, might be better spent in working up some of these difficult questions that Dr. Apostoli is laboring so assiduously to explain. Surely he better invite the collaboration of J. P. and J. H., as the profession is losing too much in having so much of their energy misdirected and wasted.

No more claim for accurate diagnosis is made for the Rue de Jour than would be for any other clinic in Europe, conducted by able and educated men. Moreover, no more brilliant diagnoses are made than would be made by capable and experienced men elsewhere. Mistakes occur, as they do in every other hospital — and perhaps even in the practice of J. P. and J. H. — and are as willingly admitted by Apostoli as they would be by any other reasonable and sensible man. Moreover, these diagnoses are made *coram publico*, and distinguished men present are invited to express an opinion, and thus be fully satisfied with the subsequent treatment of the cases. I don't think that it is necessary for J. P. and J. H. to exercise any anxiety that the readers of the **BUFFALO MEDICAL JOURNAL** will be unduly carried away by the "wild enthusiasm" of the correspondent who wrote two letters from Paris. Whatever that correspondent's utterances may have been in April last, they were influenced by an honesty of purpose, and a personal experience of Apostoli's methods — which J. P. and J. H. question — as laid down in the more recent works and publications on electricity, and which he made himself thoroughly familiar with before commencing the use of this agent in his practice. Those remarks were further prompted by an experience of fifteen months, in a reasonably large number of cases, in which careful records were kept, and by results more satisfactory than he obtained by any of the other methods familiar to him, as laid down in recognized works on diseases of women, and the teachings of able men whom he honestly, faithfully, and studiously followed. Yes, Bigelow, Massey, Liebig and Rohé, Erb, and others, tell him, as they do J. P. and J. H., what they can expect to accomplish with electricity, and the diseases cured by it when properly employed. Nor need they war with themselves and their supposed fancies about electro-puncture, but, on the contrary, try this "simple prick," which Apostoli, Mundé, Goelet, and others, have found a sovereign remedy, before they offer any opinion as to its utility.

I would also suggest that they consult Thomas, Skene, Athill,

and many other recognized and recent works on diseases of women, and they will find that the term "cellulitis" is applied to that form of inflammation involving the cellular tissue in the broad ligaments and about the supra-vaginal portion of the cervix uteri (Skene — page 556). I used the term as it is most familiar to English-speaking people — in fact, used in preference in Soho Square and other large special hospitals in London — and so willingly accepted by the most recent authors that they commence the discussion of this form of inflammation under the title "pelvic cellulitis." They know, Mr. Editor, and so did your Paris correspondent, that an inflammation does not confine itself purely and simply to one class of tissue, but usually involves, to a greater or less extent, adjacent structures as well. Authors are satisfied with the term because it is practical, convenient and expressive, although not thoroughly scientific. Recent works in pathology are not necessary to inform the readers of the *BUFFALO MEDICAL AND SURGICAL JOURNAL* on this question, nor was the brilliant suggestion of J. P. and J. H. I wonder if they are juggling with terms to appear learned and transcendental, since brilliant, educated and scientific men continue to be satisfied with an old nomenclature?

The pain, as I said in my letter, is not great, if care be exercised in the use of the external pad — at all events, not sufficient to be a barrier to the employment of this powerful agent.

Hemorrhage is checked, no matter what J. P. and J. H. say to the contrary, and, I believe, more permanently than by any other method that the general profession is acquainted with. That it fails in some cases, may be true, but on this account must it be relegated to disuse, and considered worthless and unreliable? If they read my letters more carefully, they will see that I said the patient bled profusely, after an examination, and that sixty ma. positive galvanism completely checked the hemorrhage, the séance lasting about ten minutes.

True, some cases of menorrhagia and metrorrhagia seem to be aggravated by electrical treatment, and I suggested that possibly too small carbon tips were used, and that the mucous membrane of the uterus was not thoroughly cauterized over its entire surface. In this opinion, Dr. Goelet bears me out by his expressions as published in the *Archives of Pediatrics and Gynecology*, August, 1890.

Perhaps J. P. and J. H. will find more to convince and less to

discourage them in electricity, if they learn how to use it properly, and follow out the details of treatment more carefully, and I would suggest a visit to Apostoli's clinic to further their knowledge in this important branch of therapeutics. **H. E. HAYD.**

78 NIAGARA STREET. Oct. 10. 1890.

THE HOSPITAL GRADUATE DEGREE.

Editors Buffalo Medical and Surgical Journal:

DURING the past few years there has arisen a popular demand, fostered by certain leading physicians and medical societies, for a radical advance in the medical qualifications of the physicians of this State. Some decided benefit has already come from the agitation of this subject, as is seen in the additional requirements now prescribed for the entrance and graduation from our medical colleges, and by the special branches taught to, and required of, the students of these schools. Nearly the whole medical fraternity unite, or appear to unite, in this demand for higher medical education. Several schemes have been advanced by different persons, some of which are of ante- and others of post-graduate application. One of the latter is the scheme advanced by Dr. Geo. E. Abbott, (*Medical Record*, April 5, 1890,) of establishing a new degree, to be known as the Hospital Graduate Degree. To the latter's indication of this degree (H. G.) he would add either M. or S., according as the work had been principally medical or surgical, and affix the name of the hospital as a further indication of the character and amount of work done. It must be evident to all that the abbreviations for such a degree, if written as the author suggests, would be bungling and inharmonious in comparison to those of the more common degrees, and would be too lengthy to employ with good taste in connection with other scientific and literary degrees of far greater value. However, Dr. Abbott advances arguments to show that the new degree would be of benefit to the public and the profession, and says "it will be one means of lifting the standard of medical education." This may be true to a limited extent, but I could not favor such a proposition as this, for the reason that it would be too exclusive, and the value of the new degree would not be great enough to compensate for it. The number of hospital internes (and consequently, as now organized, hospital graduates) is, and must be, limited in comparison to the total number of M. D.'s graduated, and hence only a few could obtain the Hospital Graduate Degree, however

good their qualifications might be. I would propose the following plan, which I think is far better than Dr. Abbott's :

Our degree of Doctor of Medicine corresponds to the literary degree of Bachelor of Arts. A Bachelor of Arts, if he continues his literary studies for a certain length of time, is entitled to the degree of Master of Arts. It would be analogous if we should grant an advanced degree to those persons having an M. D. degree who could show that they had faithfully pursued their medical studies for a certain number of years since graduation, and had made material advancement in their scientific attainments, and that degree could be best called the Master of Medicine Degree. Let our post-graduate schools and those colleges that provide sufficient laboratory and clinical instruction and make provision for advanced work, grant the degree of Master of Medicine, after a personal examination of the candidate, to those graduates of a legally incorporated college who prove themselves worthy of the honor. Any work or special study accomplished by the candidate since graduation, whether it be hospital work, foreign study, or private practice, should be taken into consideration in determining his fitness for the degree. Due credit should also be given for any publication, exclusively his own, which he may present, and, if pursuing any specialty, he should have the benefit of his proficiency in that branch. It might also be well to require an attendance of a few weeks at the school from which the new degree is desired.

By this plan, it will be seen, we would have a degree that would mean something, and one which the majority of the physicians would desire. If it was thought best to attempt to increase the remuneration by law of those who fitted themselves and took the advanced degree, its possession could be made necessary to constitute eligibility to any state, county, or municipal medical office. Further, it could be made to apply to the Examiner in Lunacy, and when the State takes action in the matter of expert testimony the M. M. degree might be made requisite to an expert witness. By such means the financial inducements for higher education would be many.

By this plan the hospital interne would stand the same chance as his professional brethern, while the doctor who had spent months and money in foreign study under some celebrated teacher, would have recognition of his labor, and why should he not have "credit for work done" as well as the hospital interne?

I am not in favor of the needless multiplication of degrees, but

the great number of ignorant quacks who practise under the sanction of the State, and who have a legal claim to the degree of M. D., have brought discredit to the profession, and have reduced the high token of educational excellence nearly to the same level with the title "Prof.," which is being assumed by almost every teacher in our country schools. Justice to the educated physician seems to demand some remedy, but it should be dealt out only to the meritorious, and not as rewards to the wealthy and influential.

CLARENCE KING, M. D.

MACHIAS, N. Y., October 6, 1890.

Literary Notes.

THE seventh edition of "Da Costa's Medical Diagnosis" is now announced by J. B. Lippincott Company as ready. The work has undergone a thorough revision at the hands of its eminent author, and many chapters have been entirely re-written, so as to inculcate all that has been added to our knowledge of disease up to the present time. A number of wood-cuts are included, especially of such microörganisms as have proved to be of practical significance in diagnosis. All the illustrations are original, and many are from sketches, or based on sketches, taken directly from cases of interest. There is no work more helpful to a young practitioner than this one, which has already been pronounced by eminent critics "the best book on diagnosis extant."

ANOTHER valuable book just issued by J. B. Lippincott Company, is Prof. Garretson's Treatise on the Diseases and Surgery of the Mouth, Jaws, Face, Teeth, and Associate Parts. Upon the appearance of the first edition many years ago, it assumed the leading place as a text-book, to which its merit and the distinguished position of its author entitled it. Much important matter has been added to the new edition, together with numerous illustrations, which greatly increase its value to dentists, surgeons, and physicians.

MRS. GRANT'S LITERARY WORK.—Mrs. Ulysses S. Grant has been induced by a New York editor to tell the story of her courtship with General Grant, and the warrior's proposal to her, in an article published in the October number of *The Ladies' Home Journal*.

CAMPANINI, the famous tenor, has written a striking article on "How to Train the Voice," for *The Ladies' Home Journal*, and it will appear in the November number of that periodical.

BUFFALO MEDICAL AND SURGICAL JOURNAL

A MONTHLY REVIEW OF MEDICINE AND SURGERY.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed to the editors :
284 FRANKLIN STREET, BUFFALO, N. Y.

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NOVEMBER, 1890.

No. 4.

Editorial.

THE NEW JERSEY STATE EXAMINING BOARD.

A RECENT exchange brings the news of the passage of the law establishing the State license for the practice of medicine in the adjacent commonwealth of New Jersey.

Dr. William Perry Watson, Secretary of the State Board of Medical Examiners for New Jersey, has kindly sent us a neat little reprint of the Act, which also contains the regulations for conducting the examinations under it.

We must confess to a little regret, as we read this new law, that New York's is not more like unto it, for we recognize some familiar features that were highly prized in the bill which our County Medical Society recommended to the State Legislature many years ago. Hereafter, there will be no question about the divorcement of the teaching and licensing powers in New Jersey. The diploma of the medical school is no longer a license to practise, but in order to make the divorce absolute and unconditional, the law provides that the members of the licensing board shall not be connected in any way with any medical college.

We well remember that the presence of a similar clause in the original Erie County bill brought to that measure many of its most vigorous enemies, and cost its friends frequent defeats; but there were some of us that loved the clause for various reasons, among others for the enemies it made.

Another feature of this law calls for particular commendation, in that it expressly defines what is the practice of medicine. These examining-board laws are all essentially police regulations,

having for their purpose and end the protection of the citizen from medical impropriety or incompetency. It is a weak spot in many of the acts that the practice of medicine is not defined, and the shrewd attorney has little difficulty in clearing his client from well-deserved penalty by the answer that his particular trick, abortion, feticide, tape-worm cure, bone-setting, mind cure, etc., etc., is not "practising" medicine. This stock answer will not work as well under the new law in Jersey. The greater efficiency of the measure as a police regulation is also secured by the clause giving the board authority to revoke license for certain causes.

This new member of the State licensing boards is of the "happy family" order,—physicians, homeopaths and eclectics are there in sweet accord and peace; and we trust that they may so unselfishly agree and that their work may so prosper, that, before the decade is over, their history may become a powerful object lesson to the legislators of the Empire State.

As State after State makes provision for giving citizens the advantages of the services of an educated and competent medical profession, the impetus of the movement becomes more and more manifest. In the near future, the charlatan, the quack, the medical ignoramus, will have trouble in deciding as to what community he will favor with his peculiar services.

It might prove an interesting item in statistics to ascertain the number of Canadian graduates who have thought it wiser to seek fame and fortune in the State of New York, rather than try the examination for license in their own country.

ANOTHER NEW MEDICAL LAW.

WE CALL the attention of our readers in this State to the following circular letter, addressed to the medical profession, which explains itself :

BUFFALO, N. Y., June 2, 1890.

Dear Doctor : — The committee of the Medical Society of the State of New York for the Prevention of Blindness enclose to you herewith a copy of a law passed by the Legislature during the last session. By thus calling the attention of certain members of the profession, of examiners of midwives, and of midwives themselves, to the existence of such a law, it is hoped that its purpose may be better fulfilled. The committee would urge the desirability of promptly reporting cases of its violation to the County District

Attorney, or other proper legal authorities, either directly, or through the County Medical Societies. And, with a view to even more stringent regulations in the future, the chairman of the committee would be obliged for information regarding any cases of conviction under this law.

Very sincerely yours,

LUCIEN HOWE, *Chairman*,

183 Delaware avenue, Buffalo.

HENRY D. NOYES,

233 Madison avenue, New York.

E. V. STODDARD,

68 South Washington street, Rochester.

AN ACT FOR THE PREVENTION OF BLINDNESS IN INFANTS.

The People of the State of New York, Represented in Senate and Assembly, do enact as follows :

SECTION 1. Should any midwife or nurse having charge of an infant in this State, notice that one or both eyes of such infant are inflamed or reddened, at any time within two weeks after its birth, it shall be the duty of such midwife or nurse so having charge of such infant, to report the fact in writing, within six hours, to the health officer, or some legally qualified practitioner of medicine, of the city, town, or district in which the parents of the infant reside.

§ 2. Any failure to comply with the provisions of this act shall be punished by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both.

§ 3. This act shall take effect on the first of September, eighteen hundred and ninety.

THE meeting of the Mississippi Valley Medical Association, held in Louisville, October 8, 9, and 10, 1890, under the presidency of Dr. Joseph M. Matthews, was a scientific, social, and numerical success. The register contained the names of 167 members on the first day, and many more were added subsequently.

The address, "The Medical Student," by Dr. John A. Wyeth, of New York, was an attractive part of the programme, and the hall where it was delivered proved inadequate to the necessities of the occasion, many reluctantly turning away. An attempt was made to secure another auditorium, but too late to be effectual.

A long list of valuable papers was read and discussed, and the contributions to the literature of medicine will mark an epoch. Many distinguished men were present, among whom we note the names of Drs. Frank Woodbury, Philadelphia; William Porter, St. Louis; Charles A. L. Reed, Rufus B. Hall, J. C. Culbertson,

Edwin Ricketts and G. I. Cullen, of Cincinnati; David Barrow and B. L. Coleman, Lexington.; J. C. Sexton, Rushville, Ind.; R. Stansbury Sutton, Pittsburg; John H. Hollister, Chicago; and Dr. Isaac Newton Love, of St. Louis, editor of the *Medical Mirror*, was there *in propria personæ*, to which fact the reflections in the *Mirror* for November will amply testify. The exhibitors of books, instruments and pharmaceutical products were numerous, among whom we note the following prominent houses:

Reed & Carnrick, New York, manufacturers of infant foods and dietetic preparations, represented by Dr. C. C. Fife.

Dietetic Gazette, of New York, represented by Dr. A. H. Still.

Lambert Pharmacal Company, St. Louis, O. H. Dreyer in charge.

H. K. Wampole & Co., Philadelphia, manufacturing druggists, represented by J. E. Langley.

Tarrant & Co., New York, importers Hoff's Malt Extract and manufacturers of Tarrant's Aperient, represented by N. E. Hulbert.

Eli Lilly & Co., pharmaceutical chemists, Indianapolis, represented by Walter H. Evans and J. K. Lilly.

Fairchild Bros. & Foster, New York, manufacturing chemists, represented by Jas. Christie and Jas. Carr.

John Wyeth & Bro., manufacturing chemists, Philadelphia, represented by T. D. Ballard and F. W. McClerkin.

Lea Brothers & Co., medical publishers, Philadelphia, represented by Dr. P. L. Kimball.

D. Appleton & Co., medical publishers, New York, Dr. R. B. Granger, managing editor *New York Medical Journal*.

Wm. R. Warner & Co., manufacturing chemists, Philadelphia, represented by A. D. Roach.

THE *Dietetic Gazette* announces that one of Reed & Carnrick's extensive factories at Goshen, N. Y., was destroyed by fire on the 10th instant. This factory was devoted wholly to the production of their Soluble Food and Lacto-Preparata, and contained extensive and valuable machinery. They had considerable stock of these foods at their New York office, and consequently there will be no delay in filling orders. The factory will be at once rebuilt three times the size of the one burned, with machinery correspondingly enlarged.

Society Meetings.

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- THE Southern Surgical and Gynecological Association will hold its regular annual meeting at Atlanta, Ga., Tuesday, Wednesday, and Thursday, November 11, 12, and 13, 1890, under the presidency of

Dr. George J. Engelmann, of St. Louis. The permanent secretary, Dr. W. E. B. Davis, of Birmingham, Ala., is out with the preliminary programme that contains a long list of valuable papers.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK. — The eighty-fifth annual meeting will be held in the City of Albany, Tuesday, Wednesday, and Thursday, February 3, 4, and 5, 1891. The Business Committee has been appointed, and is composed of the following-named gentlemen: Dr. Herman Bendell, 178 State street, Albany, *Chairman*; Dr. Seneca D. Powell, 12 West 40th street, New York; and Dr. James D. Spencer, Watertown.

It is desirable that those who intend to present papers should notify one of the members of the Business Committee, giving titles, on or before December 15, 1890, as the programme will be made up and issued *early* in January.

WILLIAM WARREN POTTER,
President.

284 Franklin Street. Buffalo, N. Y., October 6, 1890.

THE Microscopical Club will hold its next meeting Tuesday, November 11, 1890, with the following programme: Exhibition, W. H. Bergtold, M. D.; Some Points in Photomicrography, George H. Blackham, M. D., F. R. M. S., Dunkirk, N. Y.; Street Car Straps, Lucien Howe, M. R. C. S. (Eng.)

THE Buffalo Pathological Society will hold its next meeting Friday, November 21, 1890, at eight o'clock P. M. Annual address of the President, Dr. DeLancey Rochester. Exhibition of pathological specimens.

THE Buffalo Obstetrical Society's next meeting will be held Tuesday, November 25, 1890, at 8.30 P. M. Essayist, Dr. Banta. Subject, The After-coming Head.

THE Buffalo Medical and Surgical Association will hold its next meeting Tuesday, November 4, 1890, at 8.15 P. M.

Personal.

DR. E. STORCK has removed his office and residence to No. 220 East Eagle street, where he should be sought and addressed.

JAMES A. LYDSTON, M. D., PH. D., late chief of the Eye and Ear Department, Pension Bureau, Washington, D. C., has been elected to the chair of Chemistry in the College of Physicians and Surgeons, Chicago.

Obituary.

DR. WILLIAM VAN PELT, of Williamsville, died at his home on Sunday, October 12, 1890, aged seventy-five years. He had, since 1839, engaged in the practise of his profession in this county, and was, at the time of his death, the oldest living member of the Erie County Medical Society, of which he had been president. Dr. Van Pelt was a brother-in-law of Dr. E. Storck, of this city, and leaves seven children, two of whom are physicians, viz., Dr. J. G. Van Pelt of Suspension Bridge, N. Y., and Dr. C. L. Van Pelt, of Toledo, Ohio. The funeral was largely attended by relatives, friends and acquaintances of the deceased, from the family residence on Wednesday, October 15, 1890.

Journalistic Notes.

THE October number of *The Old Homestead*, the southern literary, fashion, and domestic monthly, published at Savannah, Ga., is up to its usual standing. It has complete and serial stories, poems and essays by some of the most brilliant southern writers, while its fashion department, handsomely illustrated, is one of the best in the country. *The Old Homestead* is the literary magazine of the south, and its freedom from erratic and sensational matter makes it a welcome visitor in the most refined homes. Its only purpose is to encourage literature and to elevate and refine. It is a magazine of forty pages 11x15, with a subscription price of \$1 per year; sample copy free. Davis Bros., publishers, Savannah.

THE UNIVERSITY MEDICAL MAGAZINE. — Is it too scientific? — The success of the *University Medical Magazine* was from the beginning a foregone conclusion. With a list of contributors heading the profession of this country, the popularity of the *Magazine* has steadily extended until the number of subscribers from the medical school, in whose interest it was originally started, is far exceeded by

those of other schools from all sections of the country. Since the issue of the first number the harshest criticism upon the *Magazine* has been that it is too scientific. If by this is meant that its teachings are carefully weighed and are accurate, and that no statements of fact are made without the support of weighty authority for their truth, then this criticism is correct. If, on the other hand, it is implied that the *Magazine* is devoted to abstract theory and investigation, which is utterly devoid of practical application, then the *Magazine* is not too scientific.

THE MONIST.—*A New Quarterly Magazine of Philosophy, Science, Religion and Sociology.*—On October the first, The Open Court Publishing Co., of Chicago, began the publication of a new magazine with the above title.

The first number contained articles by Prof. E. D. Cope, of Philadelphia; Prof. George J. Romanes, of London; M. Alfred Binet, of Paris; Prof. Ernst Mach, of Prague; Max Dessoir, of Berlin, and Dr. Paul Carus, of Chicago.

The foreign correspondence and the departments for the general review of foreign philosophical and scientific literature will be conducted, for Italy, by Prof. C. Lombroso, the criminologist; for France, by Lucien Arréat, the critic of the *Revue Philosophique*; for the northern countries, by Prof. Harald Höffding, of Copenhagen; for Germany, by Prof. F. Jodl, of Prague, and others. Reviews of American and English books will appear separately.

Articles will appear in *The Monist* by Prof. Joseph Le Conte, Prof. William James, Charles S. Pierce, Prof. Max Müller, Prof. Ernst Hæckel, and Th. Ribot.

The magazine will be devoted to the establishment and illustration of the principles of Monism in Philosophy, Exact Science, Religion and Sociology. So far as the fulfillment of this aim will allow, it will bear a popular character; publishing articles of general interest, as well as those of a more special character. The Open Court Publishing Co., 169-175 La Salle street, Chicago.

THE STORY OF A MAGAZINE.—A most interesting story of the conception and growth of *The Ladies' Home Journal*, of Philadelphia, with portraits and sketches of its proprietor and editor, has been prepared by that magazine, in pamphlet form, and will be sent free to any who will write for a copy.

Book Reviews.

ESSENTIALS OF ANATOMY and Manual of Practical Dissection, together with the Anatomy of the Viscera. Prepared Especially for Students of Medicine. By Charles B. Nancrede, M. D., Professor of Surgery and of Clinical Surgery in the University of Michigan, Ann Arbor, etc. Third edition; revised and enlarged. Based upon the last edition of Gray's Anatomy. Thirty handsome full-page lithographic plates, in colors, and 180 fine wood-cuts. Post 8vo: pp. x.—388. Philadelphia: W. B. Saunders. 1890.

The author undertook to embody in a concise and judicious way, in this small work, the essentials of anatomy, and he has succeeded most admirably. He has culled from the larger works, and especially from Gray, just such anatomical knowledge as the practitioner is most apt to need. The definitions are in almost every instance complete, so that the student gets just such distinctive facts, with the structures mentioned, as will fix them in his memory. We do not see how the student can be injured by this compend. It is intermediate between the ordinary compend and a larger work upon anatomy, and thus avoids the bad features of the former while possessing many of the advantages of the latter. We, therefore, recommend it to the student and practitioner.

The plates are beautiful and clear, the type excellent, and the whole supplemented with a full index. The author and publishers have done the profession a service in bringing out this admirable little book.

J. P.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. Consisting of Original Treatises and Reproductions in English of Books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Published monthly. Vol. VII., No. 1, July, 1890. No. 2, August, 1890. No. 3, September, 1890. New York: William Wood & Company. \$10.00 a year; single copies, \$1.00.

In the number of this valuable series for July, 1890, may be found the following interesting and instructive articles: **Stricture of the Rectum**, by Charles B. Kelsey, M. D.; **The Influence of Heredity on Alcoholism**, by Paul Sollier; **Rabies**, by Louis Pasteur, Paris; **Colotomy, Lumbar and Iliac, with Special Reference to the Choice of Operation**, by Thomas Bryant, F. R. C. S.; **Massage of the Abdomen**, by Rubens Hirschberg, M. D.

In the number for August, 1890, the following subjects are treated: **Morbid Blushing, its Pathology and Treatment**, by Harry

Campbell, M. D.; *Alcoholism in Women*, by Dr. Thomeuf; *The Different Methods of Lifting and Carrying the Sick and Injured*, by G. H. Darwin, M. D.; *Treatment of Ingrowing Toe-Nail*, by Joseph Amiard, M. D.; *Chronic Bronchitis and its Treatment*, by William Murrell, M. D.

The number for September, 1890, is devoted to the consideration of *Insomnia and its Therapeutics*, by A. M. Macfarlane, M. D. An index for these three numbers accompanies the last one, which makes a complete volume for binding.

We have heretofore frequently expressed our opinion of the value of the monographs that this great publishing house are putting forth in this form, and these three numbers are fully up to the standard. The most of the titles they contain are of interest to the general practitioner, and a few to the surgeon, while all must make haste to possess this last one, that every medical man will find instructive.

BOOKS AND PAMPHLETS RECEIVED.

A Text-Book of Comparative Physiology, for Students and Practitioners of Comparative (Veterinary) Medicine. By Wesley Mills, M. A., M. D., D. V. S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal; author of a text-book of Animal Physiology, etc. With 476 illustrations. Small octavo: pp. xx.—636. New York: D. Appleton & Co. 1890.

The Biography of Ephraim McDowell, M. D., "The Father of Ovariectomy." By his Granddaughter, Mary Young Ridenbaugh. Together with valuable scientific treatises and articles relating to Ovariectomy, and eulogistic letters from eminent members of the medical profession in Europe and America. Small octavo, full Russia. gilt: pp. xvi.—538. New York: Charles L. Webster & Company. 1890. Wm. J. Dornan, Philadelphia, Printer.

Medical Diagnosis, with Special Reference to Practical Medicine. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DaCosta, M. D., L. L. D., Professor of Practice of Medicine and Clinical Medicine at the Jefferson Medical College, Philadelphia; Physician to the Pennsylvania Hospital; Consulting Physician to the Children's Hospital, etc., etc. Illustrated with engravings on wood. Seventh edition, revised. 8vo: pp. 995. Philadelphia: J. B. Lippincott Company. London: 10 Henrietta street, Covent Garden. 1890. Price, cloth, \$6.00.

A Manual of Modern Surgery. An Exposition of the Accepted Doctrines and Approved Operative Procedures of the Present Time. For the use of students and practitioners. By John B. Roberts, A. M.,

M. D., Professor of Surgery in the Woman's Medical College of Pennsylvania; Professor of Anatomy and Surgery in the Philadelphia Polyclinic; Lecturer in Anatomy in the University of Pennsylvania. Octavo. 780 pages, 501 illustrations. Cloth, \$4.50; leather, \$5.50. Philadelphia: Lea Brothers & Co. 1890.

Transactions of the American Surgical Association. Volume the Eighth. Edited by J. Ewing Mears, M. D., Recorder of the Association. 8vo; pp. xx.—290. Philadelphia: Printed for the Association and for sale by P. Blakiston, Son & Co. 1890. Dornan, Printer.

Essentials of Practice of Medicine. Arranged in the form of Questions and Answers. Prepared especially for students of medicine. By Henry Morris, M. D., late Demonstrator Jefferson Medical College; Visiting Physician to St. Joseph's Hospital, etc. With a very complete appendix on the Examination of Urine. By Lawrence Wolff, M. D., Demonstrator of Chemistry, Jefferson Medical College. Saunders's Question Compends, Nos. 8 and 9. Double Number. Philadelphia: W. B. Saunders. 1890.

Ointments and Oleates, Especially in Diseases of the Skin. By John V. Shoemaker, A. M., M. D., Professor of Materia Medica, Pharmacology, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. Second edition, revised and enlarged. No. 6 in the Physician's and Student's Ready Reference Series. Philadelphia and London: F. A. Davis. 1890.

Epilepsy: Its Pathology and Treatment. Being the Essay to which was awarded a prize of 4,000 francs by the Academie Royale de Médecine de Belgique, December 31, 1889. By Hobart Amory Hare, M. D., B. Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Physician to St. Agnes' Hospital and to the Children's Dispensary of the Children's Hospital, etc. No. 7 in the Physician's and Student's Ready Reference Series. Philadelphia and London: F. A. Davis. 1890.

Essentials of the Diseases of Children. Arranged in the form of questions and answers, prepared especially for Students of Medicine. By William M. Powell, M. D., Physician to the Clinic for the Diseases of Children in the Hospital of the University of Pennsylvania, etc. Saunders's Question Compends, No. 15. Philadelphia: W. B. Saunders. 1890.

Transactions of the Medical Society of the State of Pennsylvania, at its fortieth annual session, held at Pittsburgh, 1889-90. Volume XXI. Published by the Society. Philadelphia: Wm. J. Dornan, Printer. 1890.

The Science and Art of Obstetrics. By Theophilus Parvin, M. D., LL. D., Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College, Philadelphia, and one of the Obstetricians

to the Philadelphia Hospital. Second edition, revised and enlarged. Illustrated with 231 wood cuts and a colored plate. Pp. xvi.—704. Philadelphia: Lea Brothers & Co. 1890. Price, cloth, \$4.25; leather, \$5.25. Buffalo: Peter Paul & Bro.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M. D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, New York, etc., etc. Seventh edition, thoroughly revised. In one octavo volume of 881 pages, with 51 illustrations. Cloth, \$4.50; leather, \$5.50; Philadelphia: Lea Brothers & Co. 1890. Buffalo: Peter Paul & Bro.

A Dictionary of Practical Medicine. By various writers. Edited by J. Kingston Fowler, M. A., M. D., Fellow of the Royal College of Physicians; Senior Assistant to the Middlesex Hospital, and Lecturer on Pathological Anatomy in the Medical School; Senior Assistant Physician to the Hospital for Consumption and Diseases of the Chest. Brompton. 8vo; pp. xxvi.—942. Philadelphia: P. Blakiston, Son & Co. 1890. Buffalo: Peter Paul & Bro.

The Medical Student's Manual of Chemistry. By R. A. Witthaus, A. M., M. D., Professor of Chemistry and Physics in the University of the City of New York; Professor of Chemistry and Toxicology in the University of Vermont, Member of the Chemical Societies of Paris and Berlin, Member of the American Chemical Society, Fellow of the American Academy of Medicine, of the New York Academy of Medicine, of the American Association for the Advancement of Science, etc. Third edition. New York: William Wood & Co. 1890. Buffalo: Peter Paul & Bro.

The Essentials of Medical Chemistry and Urinalysis. By Sam. E. Woody, A. M., M. D., Professor of Chemistry and Public Hygiene, and Clinical Lecturer on Diseases of Children in the Kentucky School of Medicine. Third edition. Revised, enlarged, and illustrated. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1890. Buffalo: Peter Paul & Bro.

A Compend of Surgery. For students and physicians. By Orville Horwitz, B. S., M. D., Demonstrator of Anatomy in Jefferson Medical College; Chief of the Out-door Surgical Department of Jefferson Medical College Hospital, and late Resident Surgeon of the Pennsylvania Hospital, Philadelphia. Quiz Compend No. 9. Third edition; thoroughly revised, enlarged and improved, with 91 illustrations. Philadelphia: P. Blakiston, Son & Co. 1888. Buffalo: Peter Paul & Bro.

A Compend of Equine Anatomy and Physiology. By William B. Ballou, M. D., Professor of Equine Anatomy, and formerly Lecturer on Physiology, New York College of Veterinary Surgeons. Instructor in Genito-Urinary Surgery, New York Polyclinic; Surgeon to Bellevue

Dispensary : late House-Surgeon, Bellevue Hospital, New York. With twenty-nine graphic illustrations, selected from Chauveau's Comparative Anatomy. Quiz Compend No. 12. Philadelphia : P. Blakiston, Son & Co. 1890. Buffalo : Peter Paul & Bro.

Dust and Its Dangers. By T. Mitchell Prudden, M. D., Author of "A Manual of Practical Normal Histology," "The Story of the Bacteria," etc. New York : G. P. Putnam's Sons. 1890. The Knickerbocker Press. Buffalo : Peter Paul and Bro.

Lectures on Massage and Electricity in the Treatment of Disease (Masso-Electro-Therapeutics). By Thomas Stretch Dowse, M. D., Fellow of the College of Physicians of Edinburgh ; Associate Member of the Neurological Society of New York, etc. Small 8vo ; pp. xx. — 379. Medical Classics. New York : E. B. Treat & Company. 5 Cooper Union. Price, \$2.75.

Intestinal Diseases of Children. By A. Jacobi, M. D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons ; ex-President of the New York Academy of Medicine, etc. Two volumes. Second edition. Physician's Leisure Library. Number 6. Detroit : George S. Davis. 1890.

A Practical Treatise on Headache, Neuralgia, Sleep and its Derangements, and Spinal Irritation. By J. Leonard Corning, M. A., M. D., Consultant in Nervous Diseases at St. Francis Hospital ; Fellow of the New York Academy of Medicine ; Member of the New York Neurological Society, etc. Second edition, with an appendix — Eye-Strain, a Cause of Headache. By David Webster, M. D., Professor of Ophthalmology in the New York Polyclinic ; Surgeon to the Manhattan Eye and Ear Hospital, etc., etc. In one large 8vo volume, nearly 300 pages. Price, \$2.75. Uniform in style with Medical Classics. Special rate for the set. E. B. Treat, publisher, 5 Cooper Union, New York.

Physical Diagnosis and Practical Urinalysis. An Epitome of the Physical Signs of the Heart, Lung, Liver, Kidney, and Spleen in Health and Disease. Edited by John E. Clark, M. D., Professor of General Chemistry and Physics in the Detroit College of Medicine. Fully illustrated. Cloth, 12mo ; pp. 193. Detroit : *The Illustrated Medical Journal Company*. 1890.

Stricture of the Rectum. A Study of Ninty-six Cases. By Chas. B. Kelsey, M. D., Professor of Diseases of the Rectum at the New York Post-Graduate School and Hospital ; late Professor of Rectal Surgery at the University of Vermont, etc., etc. Paper, 8vo ; pp. 46.

Transactions of the Association of American Physicians. Fifth Session, held at Washington, D. C., May 13, 14, and 15, 1890. Volume V. Cloth, 8vo ; pp. 275. Philadelphia : Printed for the Association, 1890.

Menstruation, and the Removal of Both Ovaries. By George J. Engelmann, A. M., M. D., St. Louis, Mo. Philadelphia: Reprint from Transactions Southern Surgical and Gynecological Association. September, 1889. .

The Sewerage of Columbus, Ohio. Address of Col. George E. Waring, Jr., at Board of Trade auditorium, Columbus, O., and Discussion following. The Nestbote Co. 1890.

Extra-Uterine Pregnancy. By E. P. Bernardy, M. D. Reprint from *Annals of Gynecology and Pediatrics*. July, 1890.

The Recurrence of Puerperal Fever. By Eugene P. Bernardy, M. D. Philadelphia. Paper, pp. 6.

Binoxide of Mercury. Its Antiseptic Use. By Eugene P. Bernardy, M. D. Philadelphia. Reprint from Transactions of the Philadelphia County Medical Society. January 23, 1890.

Ten Attacks of Appendicitis Within Eleven Months. Operation; Cure. By Eugene P. Bernardy, M. A., Philadelphia. Reprint from Transactions of the Philadelphia County Medical Society. November 13, 1889.

The Popularization of Sanitary Science. Annual address before the Third District Branch of the New York State Medical Association at Syracuse, N. Y., June 19, 1890. By J. G. Orton, M. D., President New York State Medical Association. Reprint from *The Sanitarian*. August, 1890.

Case of Corneal Transplantation from the Rabbit's to the Human Eye, and A Singular Case of Injury. By William F. Smith, M. D., Member of the Heidelberg Ophthalmological Society, etc., etc. Reprint from *The Archives of Ophthalmology*. Vol. XIX, Nos. 2 and 3. 1890.

Suppuration of the Antrum of Highmore. By Morean R. Brown, Professor of Laryngology and Rhinology at the Chicago Polyclinic. Reprint *The New York Medical Journal*, July 19, 1890.

The Relations of Eye-Strain to General Medicine. By George M. Gould, M. D., Ophthalmic Surgeon of the Philadelphia Hospital. Reprint from *The Medical News*. August 23, 1890.

Address in Hygiene. By Thomas J. Mays, M. D., of Philadelphia. Reprint: Transactions of the Medical Society of the State of Pennsylvania. June, 1890.

Proceedings of the First Annual Meeting of the Tri-State Medical Association of Alabama, Georgia, and Tennessee. Held in Chattanooga, Tenn., October 15 and 16, 1889.

Fibro-Myoma of the Uterus. By Edwin Ricketts, M. D., Professor of Gynecology and Abdominal Surgery in the Polyclinic. Reprint: *The Cincinnati Lancet-Clinic*. August 2, 1890.

Diseases of Female Pelvic Organs. When to Operate by Abdominal Section. By M. B. Ward, M. D., Professor of Gynecology, Kansas Medical College, Topeka Kansas. Chicago. Reprint: *The Journal of the American Medical Association*. August 23, 1890.

Time of Conception and Duration of Pregnancy. By Geo. J. Engelmann, M. D., Fellow of the American Gynecological Society, etc., etc. St. Louis: Reprint: *St. Louis Courier of Medicine*. May, 1890.

The Pathology and Treatment of Intra-Pelvic Inflammation. By M. B. Ward, M. D., Professor of Gynecology in the Kansas Medical College, etc., etc. Topeka. Reprint: *Kansas Medical Journal*. August, 1890.

Description of a Series of Tests for the Detection and Determination of Sub-Normal Color-Perception (Color-Blindness). Designed for use in Railway Service. By Charles A. Oliver, M. D. Philadelphia: Reprint: Transactions American Ophthalmological Society. 1888.

An Explanation of the Phenomena of Immunity and Contagion Based upon the Action of Physical and Biological Laws. By J. W. McLaughlin, M. D., Austin, Texas. Reprint: Transactions Tri-State Medical Association.

The Study of Bacteriology in Medicine. By Frank T. Billings. Paper. pp. 20.

Spinal Surgery. A Report of Eight Cases. By Robert Abbé, M. D., Surgeon to St. Luke's Hospital, New York: Professor of Surgery, Post Graduate School, etc. New York. Reprint: *Medical Record*, July 26, 1890.

HEALTH BULLETINS.

Newport, R. I., August and September, 1890.

Michigan State Board of Health, August and September, 1890.

Monthly Bulletin, New York State Board of Health, July and August, 1890.

Abstract of Sanitary Reports, U. S. Marine Hospital Bureau, Washington, D. C. Vol. V., Nos. 35, 36, 37, 38, 39, 40, 41, 42 and 43.

NOTICE TO CONTRIBUTORS.

We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the JOURNAL should be handed in before the first day of the month.

The Editors are not responsible for the views or opinions of contributors.

All communications should be addressed to

284 FRANKLIN STREET, BUFFALO, N. Y.

ELIGIBLE VEHICLES FOR QUININE.

DOUBTLESS every pharmacist and physician has his favorite method of disguising the taste of unpalatable drugs, but not everyone is aware that the enterprise of manufacturing pharmacists now offers such a variety of vehicles from which to choose.

Some rely almost exclusively on pills and capsules, whereby the drug is smuggled into the stomach without recognition by the gustatory nerves. But there are patients whose apparatus for deglutition is so constructed as to render it almost impossible for them to swallow pills or capsules as well as cases where it is all important to secure immediate absorption of the medicine. When given in pill form, no matter how soluble the mass, an appreciable time must elapse before the remedy begins to have its effect.

How then can we administer quinine in solution or suspension—particularly to children or delicate ladies—without causing a disturbance in the family every time a dose has to be given? To children quinine may often be given advantageously by inunction, and the oleate of quinine especially, applied to the surface in this way, is readily absorbed and produces promptly the characteristic effect of the drug. Suppositories must not be forgotten in cases where the stomach is particularly irritable, and the hypodermic injection presents itself as a dernier resort when a prompt and powerful influence is required. But in ordinary cases quinine may be administered by the mouth.

One plan is to mix the quinine with some alkali or astringent so that the bitter sulphate or muriate becomes converted into the tasteless alkaloid or tannate.

Another plan is to combine with the quinine a mixture having a bitterness of its own, which shall blend with and modify the intolerable bitterness of the quinine, some aromatic being generally added to still further disguise the objectionable taste.

It is on this principle that cascara cordial operates, and many of those who have tried this vehicle, declare that it is the best that has yet been offered. The especial advantage which it possesses over all others is the fact that it is a laxative agent, and so renders more efficient the action of the antiperiodic.

Licorice has been long known as having a remarkable power of covering the taste of bitter medicines. This property is due to a peculiar principle called glycyrrhizin, a glucoside, insoluble in water and in acid solutions, but readily dissolved by the aid of alkalies.

Where quinine is given in powders, it may be rendered nearly tasteless by simply rubbing it up with a small quantity [one-fourth its weight] of ammoniated glycyrrhizin [ammonium glycyrrhizate.]

“Fluid extract licorice, for quinine mixtures,” is one of the most efficient of all the preparations employed for covering the bitter taste of quinine. The best way to use it is to drop a dose of the powder into a little of the fluid extract contained in a spoon, mix it thoroughly and swallow at once.

Aromatic elixir of licorice is to be used in the same way as the fluid extract, but is especially useful in the drug store when a single dose of quinine is called for to be taken at once.

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Original Communications.

A FEW OBSERVATIONS ON THE THERAPEUTIC VALUE OF ELECTRICITY.

By ERNEST WENDE, M. D., B. Sc.,

Clinical Professor of Dermatology, University of Buffalo.

RECENTLY a most fruitful field in galvano-therapeutics has been opened up, and notwithstanding that the science of electro-therapeutics is largely experimental, the progress in the use of the continuous or constant current has been rapid, improved apparatus, improved and accurate modes of application, effects carefully ascertained and certified, have done away with the vagueness of aim and the uncertainty of result. Well-directed experiments and fresh discoveries have closely followed each other.

It is not my intention in these brief notes to discuss the modern theories of electricity, nor even the fundamental laws which govern it, but simply to cite a few cases which have come under my observation, and which I hope may prove of some interest :

CASE I.—W. M., by occupation a thresher ; aged forty-nine ; living in the town of Bennington, Wyoming county, called at the office July 14th, to consult Dr. Starr concerning a " Film growing on my eye-ball," as he expressed it. On being told that the doctor had gone to Europe, he desired to consult Dr. Abbott ; he also being away, the patient returned to the office, when on a careful examination, I found that the so-called film was the ordinary pterygium, situated in the direction of the internal rectus. It had the usual triangular shape, with its apex attached to the corneal edge. Its color was of a pinkish hue. It was rather thick, and a number of distinctly visible blood-vessels coursed through the growth.

After some persuasion the patient finally submitted to electro-puncture, under a ten per cent. solution of cocaine. I first obliterated the blood-vessels, which was followed by numerous punctures

of the membrane itself. The insertions were made with an iridio-platinum needle, as the negative electrode, while the ordinary electro-positive sponge electrode was held in the hand by the patient. I next applied a cold water compress with directions to continue the same.

It was July 23d when I first saw the patient after the operation. The eye was much reddened and presented numerous minute spots denuded of conjunctiva. The growth, however, had virtually disappeared. I again saw him August 13th. The eye at this time was still somewhat injected and discolored. The discoloration being due in all probability to extravasated blood, the fluid having become absorbed, while the corpuscles and coloring matter remained behind, yet the globe of the eye presented a smooth appearance with no trace of the pterygium. The sitting lasted about fifteen minutes, and the strength of the current employed varied from four to seven milliampères.

CASE II.—E. B., a strong, healthy-looking young fellow ; aged twenty-five ; consulted Dr. Hoddick of this city, about one year ago, for a supposed deep stricture of the urethra. He gave a history of having had gonorrhea on several occasions, followed by the usual methods of treatment. One year prior to this, while in the city of Rochester, he was suddenly seized with an attack of retention.

He immediately consulted a local physician, who advised and practised electrolysis of the urethra, with a result which proved almost disastrous for the symptoms which ensued became so urgent, the febrile disturbance so marked, that his parents were sent for. Subsequent to the consultation with Dr. Hoddick he again experienced retention, which the doctors succeeded in relieving by the administration of the usual hip-baths, morphine, suppositories, etc. He then left town for a few months, but on his return he was again seized with a similar attack. Once more the doctor was summoned, but on this occasion all antispasmodic and anti-phlogistic treatment failed, nor could the accumulation of urine be drawn off by means of the catheter. However, the patient was finally relieved by aspirating the bladder per rectum.

A few days later, at the suggestion of Dr. Hoddick, I was invited to see the case. On instituting an examination we encountered no difficulty in passing a number of sounds, and therefore concluded that the trouble was merely spasmodic.

Some months later the patient called me up at mid-night, saying that he could not find Dr. Hoddick, and that he had just

returned from Erie. He walked into my office in a stooped manner and appeared extremely restless. He referred to pain and local uneasiness in the lower part of his abdomen. His expression was anxious, and his desire for relief urgent. He had not been able to void his urine since the previous evening. He, furthermore, stated that the retention was occasioned by an attack of diarrhea.

My first thought was to employ an anesthetic and careful catheterism, when it suddenly occurred to me that the pathological significance of reflex irritation in its bearing on retention might be relieved by electricity. This I found to be true by placing one electrode, the positive, on the perineum, the other, the negative, above the pubis, over the bladder. The current employed was the galvanic, the dosage twenty milliampères, and the length of application five minutes.

Immediately the urethral spasm became supplemented by a copious flow of urine, of a dark color and a strong odor. Immediately the patient experienced a sense of relief. Exclamations of joy were frequently uttered during the process of micturition. It was a grateful mitigation of an urgent desire. It was a gratifying result. Dr. Hoddick has since had an opportunity to confirm the value of this plan of treatment.

CASE III.—W. H. S., a well-known gentleman of this city, for many years court stenographer, and at one time a medical student, first consulted me for malignant disease May 25, 1889. The affection in question was an epithelioma, situated on the side of the nose, in close proximity to the eye, in fact involving the neighboring parts of both the upper and lower lids. The following is the history, and the treatment as addressed to that terrible disease, from the time of its first occurrence to the present date, written by the patient himself. I will give it verbatim, as there is but little for me to add :

About twenty years ago there first appeared a small growth in appearance, similar to a wart, upon the left side of the nose, at a point about equidistant from the corner of the eye and the ridge of the nose. In the course of a year or so it would occasionally develop a small scab, and upon its being removed either purposely or accidentally, there would exude a small quantity of serum. It would then heal up and be scarcely visible for some weeks, and even months. The formation of the scab became more frequent, and the size of the growth gradually became larger. About thirteen years ago I consulted the late Dr. Miner of this city, who advised its removal by the knife. He removed it in that manner. It was done at a time when he was in feeble health, and without an assistant. It bled very profusely, and from subsequent results I am satisfied there was not enough of the tissue removed. However, it healed up and gave me no more trouble for a year or so, when it began to develop again, and more rapidly than before. I then

consulted Dr. Cronyn, who was my family physician, and he advised its removal by erosion, with a sharp spoon. The effect of that treatment was about the same as that given by Dr. Miner. After continuing this treatment for a couple of years, at intervals of from three to six months, he applied a mercurial plaster, but after a few months it returned as before. He advised me to go to the late Dr. Davidson, who was making skin diseases a specialty. He treated it with mild caustics, healing it with a salicylic acid ointment. He continued this treatment for two years and a half, when he informed me that he could do nothing further for it. It had at that time spread, covering a place about five-eighths of an inch across. I then went to a cancer doctor; gave him a history of the case. He predicted that he could cure it in ten weeks, completely. He agreed to charge me nothing unless he effected a complete cure. He applied his cancer plaster on about thirty different occasions, each treatment covering a period of three or four days, and of the most heathenish torture possible to imagine. At the end of two years and a half, when the disease had spread until it covered about four times the surface that it did when he began, and extending into the canthus, I bolted. During the last year of his treatment I had been unable to use my eye for any business purpose whatever. I decided it was better to die a natural death, if necessary, from the progress of the disease than to be tortured.

I next consulted Dr. Wendé, who began his treatment one year ago last May. His first treatment by electrolysis was so successful that in less than a week the inflammation which had been present in my eye, and keeping it nearly closed during the entire time of the other cancer doctor's treatment, had almost entirely disappeared. From that day until this I have been able to attend to my business and use my eye daily, and without annoyance. If I was able to endure the treatment without having cocaine injected into the tissues, causing the eye to swell, the effects of the treatment would not be noticeable to the casual observer from any swollen appearance of the eye. When Dr. Wendé began his treatment, there was over one square inch of surface of open sore and as much more highly inflamed. At the present time the entire surface actually treated covers less than one-eighth of an inch in diameter, and in only three different points.

W. H. S.

In treating the ulceration I first injected a four per cent. solution of cocaine in the surrounding and underlying induration, and then with the ordinary iridio-platinum needle destroyed the abnormal tissue with numerous negative galvano-punctures. The insertions were made in various directions, frequently one above the other, and often at right angles with each other. The current that was allowed to pass varied from five to fifteen milliamperes. I cannot give the exact number of sittings the patient has had, approximately should say about twenty, given at irregular intervals, varying in duration from fifteen to thirty minutes. The infiltration grew gradually less after each treatment. Although not cured, the agonizing pain ceased, and the incessant nervous agitation and distress suspended. However, should I not succeed in entirely removing this dire infection even in this most promising case, it may be

truly said that electrolysis has done more to alleviate the suffering, and more toward affording a most likely means of reaching the cause, than the knife or the caustic. But, with due regard to justice, I must admit that in the majority of cases thus treated, the method is tedious and generally unsatisfactory, when the term cure comes into question, yet always palliative when relief is asked for—however, there are cases of superficial epitheliomatous ulcers of the non-infiltrating variety—surrounded by comparatively little induration, which may be dealt with most successfully with electro-puncture. Then, again, the intelligent use of this agent cannot be too strongly recommended in operations about such an important structure as the eye, where you are anxious only to destroy diseased tissue. The other advantages possessed by this treatment may be said to be that—

1. It delays the growth, even if it does not always cure.
2. It allays pain.
3. The patient is not necessarily confined to his room.

CASE IV.—C. H. S., a tough but a weary-looking lad of twenty-four; accustomed to alcohol and other things of saturation; after many months' suffering from an incessant and copious discharge of the urethra, presented himself at the Fitch Provident Dispensary for the treatment of *verruca acuminata*, the so-called venereal wart.

Of these he had many, situated on the glans penis. They were closely aggregated, club-shaped, pointed, tufted, and of a bright red color. They completely encircled and covered the glans with a corona, made up of numerous, irregular, craggy nodulations and lobulations. They represented on the whole not only morphologically but in reality a true coxcomb. One of them, which had grown more luxuriantly than the rest, having attained the size of a walnut, was supernal and overhung the meatus, rendering the process of urination unsatisfactory and harassing. The water, instead of flowing down-hill, spurted sideways and backwards, soiling his clothing, and producing an odor highly offensive.

This fleshy and vascular excrescence yielded readily to electrolysis. It was destroyed by inserting a sharp-pointed steel needle, at different points, through the base of each individual growth, on a level with the skin. The needle employed was the negative, while the ordinary positive sponge-electrode, after being thoroughly moistened, was placed on the thigh. The number of insertions varied with the size of peduncle or wart in question. As soon as the hypertrophied mass turned pale, it was an indication that the

tissue would shrivel, dry up and drop off. The time required to accomplish this will also vary with the size; usually one to two minutes will suffice.

In this instance all the smaller growths disappeared after one sitting, while the largest, which was almost sessile, needed four sittings, at intervals of three days. Two to five milliampères were used. I have employed this method for the past three years, and consider it superior to all others. In very sensitive persons I inject a two per cent. solution of cocaine hypodermically — or I produce the anesthesia by electric-cataphoresis by first applying a rubber bandage tourniquet posteriorly to the glands, a piece of absorbent cotton saturated in a six per cent. solution of cocaine is wrapped about the glands and warts — over this a number of coils are made with a very flexible copper wire. This constitutes the anode, while the ordinary sponge negative electrode, well moistened, is held tightly against the thigh. Now the current is allowed to pass for six to ten minutes, after which the warts can be destroyed without pain in the manner previously stated. Finally, the treated parts may be dusted with some astringent or desiccating powder.

This method possesses advantages offered by no other form of treatment. As you are aware, excision often produces profuse hemorrhage, which may be difficult to control. Electrolysis causes no blood-shed. Caustics, such as nitric and chromic acids, may be vulgarly termed nasty, as they are likely to spread, discoloring the parts and often producing scars. Electrolysis is cleanly and localized in its action and produces no scars. The actual cautery is no better than caustics. Ligation is tedious and uncertain. Electrolysis is certain and rapid.

174 FRANKLIN STREET.

MECHANISM OF ANEMIC MURMURS.¹

By DELANCEY ROCHESTER, M. D., BUFFALO, N. Y.

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WHEN fluid is driven with a certain amount of velocity through a constricted opening into a larger space beyond, a sound is produced which has been shown by careful experiments to depend upon the vibrations of what have been termed fluid veins, produced at a

1. Read before the Medical Club.

greater or less distance from the orifice, according to its size and the velocity with which the fluid is propelled. In the case of heart murmurs dependent upon organic lesions — whether the murmur in question is direct or regurgitant — the sound is produced in the same way, the blood being propelled with a certain velocity through a constricted opening into a larger space beyond. The vibrations of these fluid veins are transmitted to the surrounding blood, to the walls of the containing vessel, and thence through whatever medium may intervene, to the ear of the listener.

This is, beyond doubt, the true explanation of the mechanism of heart murmurs dependent upon valvular disease. But there are other conditions in which heart murmurs occur, in which there is evidence from both ante-mortem and post-mortem observation that no valvular lesion exists.

It is to the murmurs, cardiac, arterial, and venous, which accompany anemia in its various forms, to which I invite your attention this evening. Let us first consider the cardiac murmurs and decide, if possible, how they are produced, and then push our investigation to the murmurs as heard over the arteries and veins. Before answering the question as to *how* the anemic heart murmurs are produced, it behooves us to observe *where* they are produced, as this will aid us greatly in answering the first question. With the exception of Laennec, Guttman, and, in one case, Strümpell, all observers whose works I have been able to consult, agree that the anemic heart murmur is systolic in rhythm, and the majority of these observers agree that it is basic in situation. Walshe says :

This murmur is, as far as I have observed, invariably basic in seat and systolic in time, produced at the orifices of the aorta and of the pulmonary artery — with a force at each proportional to the power of its communicating ventricle ; scarcely conducted along the aorta at all ; frequently audible, on the contrary, at the second left or pulmonary cartilage ; only in exceptional cases audible below the nipple ; and never, within my experience, perceptible as far as the left apex.

Roberts says of the anemic cardiac murmur :

This has usually the position of a pulmonary systolic murmur. . . It may, however, be situated over the aorta or be heard at all the orifices.

Flint says, speaking of the diagnosis of anemia :

A frequent sign is a systolic bellows murmur, referable to the carotid arteries. Not less frequently, systolic murmurs are heard at the base of the heart, produced within the aorta and the pulmonary artery.

Strümpell says of the functional cardiac murmurs :

They are usually heard loudest over the base of the heart in the neighborhood of the pulmonary valves, although sometimes at the apex of the heart. As a rule they are purely systolic in time, but we certainly heard, in one case of pernicious anemia, a loud diastolic murmur of anemic origin.

Thus I might go on quoting one observer after another to show that the anemic murmur has been located at each of the valves of the heart, by far the largest number, placing the point of greatest intensity over the pulmonary or aortic orifice. In my own experience this murmur has had its point of greatest intensity over the aortic valve, and has been transmitted into the subclavian and carotid arteries.

Dr. George William Balfour, of Edinburgh, agrees with other observers that the anemic heart murmur is systolic in rhythm and basic in seat, but places its point of greatest intensity not over the aortic or pulmonary orifice, - but," I quote from his book, - actually about one inch and a half, or rather more, to the *left* of the pulmonary area, and in the same plane immediately over the part where the appendix of the left auricle pops up from behind, just to the left of the pulmonary artery. This so-called arterial murmur is, therefore, not arterial at all, but strictly auricular in its source. This is a most important fact : it at once links this chlorotic murmur with others whose source we distinctly know, and gives us an unmistakable clue to its true point of origin." It is a well-known fact that sometimes a mitral regurgitant murmur is heard with greatest distinctness at the above-mentioned point, the sound being conducted better - along the course of the regurgitating blood, the fluid veins producing sonorous vibrations louder at the point of impingement than at that of origin." From these observations he concludes that the heart murmur of anemia is one of mitral regurgitation.

Having thus seen at how many different points this murmur has been heard, is there any rational manner in which we can explain its production, which will satisfy all these observations, for we obviously have no right to doubt the diagnostic power of any observer unless we have actual proof of the inaccuracy of his observations.

First, then, how is this murmur produced at the aortic and pulmonary orifices ? In a healthy individual, by the ventricular systole a certain amount of blood of a definite weight is driven with

definite velocity against the semilunar valves, pressing them flat against the walls of the artery. Evidently, if the amount of blood or the weight of the blood is reduced below a certain limit, though the velocity remain the same, the valves will not be driven firmly back against the arterial wall, but will hang out into the lumen of the vessel and thus produce a constricted opening with a larger space — the cavity of the artery — beyond, all that is needed, with a certain velocity of the blood, to produce the fluid veins of Savant and the consequent sonorous vibrations resulting in the murmur. So, whether we have anemia from hemorrhage, in which the actual amount of blood is reduced, or spanemia from any cause, in which the blood is thinned and watery, diminished in weight, we can account for the murmur heard at the pulmonary and aortic orifices by the obstruction of the incompletely opened valves to the current of the blood. But how about the murmur heard at the mitral and tricuspid areas? As they are systolic in rhythm, they must necessarily be regurgitant in character.

In cases of profound spanemia, the whole muscular system becomes greatly debilitated. The heart is the hardest-worked muscle in the body and, along with the rest of the muscular system, becomes greatly weakened, in some advanced cases actually undergoing some fatty degeneration. As a result of this marked debility of the heart we have more or less dilatation of the cavities, due to diminution of elasticity in the muscular fibres of the walls. This produces some dilatation of the auriculo-ventricular orifices, and a consequent insufficiency of the valves, resulting in regurgitation. This is the explanation given by Dr. Balfour of the mitral regurgitation observed by him. That such dilatation, with some hypertrophy, does exist in cases of spanemia, has been proved by experiments upon dogs, and by post-mortem examinations in human beings.

Another method of explaining this regurgitation — one long ago brought forward by Walshe — is through the fatty degeneration and consequent weakening of the muscoli-papillares to such an extent as to allow the auriculo-ventricular valves to yield to the pressure of the blood during the ventricular systole and allow the regurgitation to take place.

In those rare cases, such as Strümpell's case of pernicious anemia, where a *diastolic* anemic murmur occurs, the dilatation of the ventricle has probably proceeded so far as to dilate the aortic orifice, and so allow regurgitation to take place at that point.

Thus, we see, we have a rational explanation of the modes of production of anemic heart murmurs, which is applicable to all cases, and is none other than that which holds in the case of organic murmurs, namely, an obstruction to the onflow of the blood, causing at one point a narrowing of the lumen of the vessel through which it passes, and thus producing the fluid veins above referred to. The arterial murmur is synchronous with the systole of the heart, and is, in my opinion, merely a transmission, along the current of the blood, of the cardiac murmur arising at the aortic orifice, such as is almost invariably found in connection with organic obstructive lesion of the aortic valve.

The venous murmur, however, is a *continuous* humming sound, and so cannot be referred for its origin to the cardiac murmur, which is necessarily intermittent, as it occurs only with the systole. This murmur, therefore, must originate in the vein itself, and here we find a cause for it. Like all the other murmurs, it, too, is caused by constriction of the lumen of the containing vessel at one point, leaving a larger space beyond, the obstruction being produced by the hanging out of the valves, due to the relaxed condition of the walls of the veins. The continuousness of the sound is due to the fact that the velocity of the blood current is much more constant, though not so great, as in the arteries.

Of course, the mode of production of so-called hemic murmurs is, and must necessarily always remain, to a certain extent, hypothetical. Still we have the following facts before us : First, that when fluid is forced at a certain velocity through a constricted opening into a larger space beyond, at a certain distance from the orifice its particles are thrown into sonorous vibrations. Second, that in certain diseased states of the cardiac valves, we have, beyond a doubt, the necessary conditions for the production of such sound, and the presence of the sound. Third, that, when there is no such diseased state of the valves, but when, from the impoverished state of the blood, we would expect the healthy valves to be placed in such a position as to produce the before-mentioned constriction, we find the murmur, the indication that such constriction exists, present. Therefore, I think we are perfectly justified in concluding that the valves are in that position, especially as the murmur can be satisfactorily accounted for in no other way.

If this explanation of the mode of production of the cardiac murmur of anemia is true, it enables us to draw certain conclusions of practical value : First, that the so-called functional cardiac

murmurs are really organic in origin, though it is not the valve, but the muscle, that is diseased ; second, certain organic diseases of the heart are curable, and that, therefore, it behooves us carefully to differentiate our cases, in order to make a true prognosis. Dr. Balfour relates several cases of cardiac murmur in which an unfavorable prognosis had been given by observers of good repute, which, however, he had diagnosed as anemic in origin, and by proper treatment had caused to disappear, the patients regaining complete health and strength.

The chief points in diagnosis of the anemic murmur are its softness and the generally diffused area over which it is heard, together with the presence of the venous hum and the other signs of anemia, including the result of spectroscopic and microscopic examination of the blood.

Of course, it is possible — and not infrequent — for organic heart disease and anemia to co-exist ; but we should always bear in mind the fact that the anemia *may* be the prime cause, and consequently we should be very guarded in our prognosis until that condition has been overcome ; for, with the overcoming of the anemia, we may find that the heart disease also has been vanquished.

469 FRANKLIN STREET.

NOTE ON SUBJECTIVE CONJUNCTIVITIS.

By JACOB GOLDBERG, M. D., Buffalo, N. Y.

THE condition which I describe under the above title, was brought to my attention by Dr. Bates, of the New York Post-Graduate Medical School, where I attended a course of lectures on the eye and ear, and has been productive of considerable good to me, inasmuch as the text-books do not consider it as here described.

The diagnosis must be made from the statements of the patient, as there are no objective symptoms. He usually states his case about as follows : Asthenopia (headache), slight ; photophobia (fear of light), a feeling at times as though there were a particle of sand under the upper or lower lid, which, however, lasts but a moment or two. Upon entering a closed room from the street the eyes water ; upon waking in the morning the lids are slightly glued together, as it were, and the use of water is necessary to open them ; after reading for one or two hours, or at the theatre from the constant application of the eyes toward the stage, they become red ; then the redness quickly fades upon going into the open air and

becoming relieved from the strain of constant application; after reading for any length of time, the subject finds that he is almost unable to raise the upper lid.

After receiving the above train of symptoms we find, on examination, everything apparently normal; no redness or swelling of the conjunctiva: no strictures of any kind, or any condition to account for the patient's annoying condition. What are we to do in such cases? In those that I have observed the following plan has been of great benefit: Massage; rubbing the forehead with dry towel will be a service; turkish baths are very good as an aid to relieve any congestion that may exist; a solution of ether, to which may be added lavender or rose water, to be rubbed on the lids for ten or fifteen minutes, will be very serviceable; correct any error of refraction that may exist, although it may only be a half of a diophré of myopia or hypermetropia; order tinted or colored glasses, if photophobia persists; remove any and all irritation, reflex or otherwise; open the bowels by aloes or any cathartic, and finally prescribe constitutional treatment, if indicated.

145 CEDAR STREET.

Society Proceedings.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED Meeting, September 24, 1890.

The Vice-President, JOHN B. ROBERTS, M. D., in the chair.

Dr. CHARLES B. PENROSE read a paper on

THE TREATMENT OF HEMORRHOIDS BY EXCISION.

My object in presenting this paper is to urge the more general use of Whitehead's operation of excision in the treatment of certain cases of hemorrhoids.

In 1887, Mr. Whitehead, of Manchester, reported¹ three hundred consecutive cases of hemorrhoids which had been successfully treated by the method of excision and suture. His operation is performed in the following manner:

1. The patient is placed on a table in the lithotomy position, with the hips well elevated.

1. *British Medical Journal*, February 6, 1887.

2. The anal sphincters are then thoroughly paralyzed by digital stretching.

3. The mucous membrane of the rectum is divided at its junction with the skin around the entire circumference of the bowel.

4. The mucous membrane, with the attached hemorrhoids, is dissected from the submucous tissue, and the cuff or cylinder thus formed is dragged below the skin margin.

5. The mucous membrane above the hemorrhoids is then divided transversely, thus removing the pile-bearing area, and the operation is completed by suturing the upper margin of the severed membrane to the free margin of the skin.

The advantages claimed by Whitehead for this method of treatment are based on pathological and on surgical reasons. He considers that the internal hemorrhoids, which are generally regarded as localized distinct tumors, amenable to individual treatment, are, as a matter of fact, component parts of a diseased condition of the entire plexus of veins surrounding the lower rectum, each venous radicle being similarly, if not equally, affected by an initial cause, constitutional or mechanical.

The operation of excision is the only one which removes this whole diseased area. It is, therefore, demanded for this pathological reason. It is, in addition, surgically more perfect than any other method of treatment, because it provides for the readjustment of healthy tissues, with the object of securing primary union and rapid convalescence. It does not leave the sluggish ulcer of the cautery, nor is it attended with the pain and slow convalescence of the ligature.

My experience with this operation is limited to ten selected cases. Only those cases were selected in which there existed a complete circle of hemorrhoidal tumors surrounding the lower margin of the rectum, since for such cases Whitehead's treatment of excision seems to be most particularly adapted.

The details of the operation are simple and easy to execute. In dividing the mucous membrane from the skin, it is best to begin at the posterior margin of the anus in order to prevent the blood from obscuring the field of operation. No skin should be sacrificed, even though there appear to be redundant tags around the margin of the anus.. The skin always retracts somewhat and the tags shrivel and disappear before firm union has taken place. Failure to observe this rule may result in subsequent serious

trouble. Kelsey reports the case of a woman who had been subjected to a so-called Whitehead operation, and who presented herself to him with a complete circle of excoriated mucous membrane, extending for one inch outside the anus. It is probable that in this case the operator had sacrificed too much skin.

On the other hand, the upper section of the mucous membrane should be made in the same horizontal plane throughout, in order to prevent subsequent ecropion ani.

The dissection of the mucous membrane from the underlying tissue is exceedingly easy, except in some cases of old — or long-standing — piles. The attachment of the sub-mucous tissue is very loose, and separation can be effected with the finger or with the handle of the scalpel. It is not always possible to dissect the piles completely from the underlying structures, as they may involve not only the mucous but the sub-mucous tissues, and in such cases it is necessary to cut partly through the piles until the healthy mucous membrane above is reached. Repeated attacks of inflammation, of course, render closer the adhesion of the pile area to the underlying structures. In one of my own cases, where the piles had existed for forty years, and had frequently been inflamed, the adhesions to the two sphincters were so close that a few muscular fibres were cut away during the removal.

The amount of blood lost during the operation is surprisingly small. Whitehead states that he has often operated on severe cases, and not found it necessary to twist a single vessel. In five of my cases, no hemostasis was necessary. Bleeding is avoided by adhering closely to the mucous membrane in the dissection, and by separating it from the sub-mucous tissue. The arterial bleeding occurs in those cases of old piles which have been subjected to previous operations or to attacks of inflammation, and in such cases the hemorrhoidal and anal arteries has taken place secondary to the anastomosis of the hemorrhoidal veins. The bleeding from the mucous membrane can be reduced to a minimum by following Whitehead's method of inserting the ligatures as described, or by following Marcy's plan of encircling the piles with several stitches of catgut around the necks of the piles, and tying the piles before cutting the mass away.

Whitehead's object is in all cases to remove the complete cylinder of mucous membrane, whether or not the whole of this area appears to be diseased. He gives this advice for the reason, which

I have already stated, that he considers the individual piles as but part of a general pathological condition, involving all the lower hemorrhoidal veins of the rectum.

Whether we accept this pathological view or not, it is best to follow this plan, and to make a complete circular division of the mucous membrane, as by this method the best surgical results are obtained, and ectropion ani prevented. I have seen a case in which only one-half of the circumference of the mucous membrane of the rectum was removed, and a few hours after the operation an edematous swelling formed in the other half, which has now resulted in a hemorrhoidal tumor almost as annoying as the one for which the operation was performed.

In attaching the mucous membrane to the skin, Whitehead uses the interrupted silk suture. He never removes the sutures, but allows them to ulcerate through—a process which is very easily accomplished. In my own cases I have used the continuous catgut suture.

The treatment of these cases after operation is very simple. It is rarely necessary to use opium or the catheter. An opium and belladonna suppository introduced immediately after the operation, is in most cases all that is required. The bowels can be moved in from twenty-four hours to four days, and with very little pain. Absence of pain after Whitehead's operation is due to the thorough paralysis of the sphincters, and to the fact that no source of irritation is left beyond that of a clean linear incision, united without tension and without strangulation of tissue.

A glance at the histories of my own cases shows that they were all cases of aggravated hemorrhoids, in which the piles covered the whole circumference of the lower part of the rectum. In all the cases the disease had existed for many years, and two had been subjected to previous operation by the ligature.

In only one case was there anything like free bleeding during the operation.

In all the cases a suppository of one-half grain of extract of opium and one-half grain of extract of belladonna was introduced immediately after the operation, and this was all the opium required, except in three cases, in which one-sixth grain of morphine was subsequently administered.

The catheter was used in only three cases, and in these for a period not longer than twenty-four hours. The length of time that the case is confined to bed depends to a great degree upon the

social standing and the disposition of the patient. In my cases it varied from two to ten days. Every case should be able to sit up in four or five days, and to resume work in ten days or two weeks.

The bowels were opened without pain in from twenty-four hours to four days after the operation.

No complications of any kind followed these operations. Union takes place quickly, and generally one dressing, taken off when the bowels are moved, is all that is necessary. In no case was there incontinence from paralysis of the sphincters, or any tendency to stricture from contraction of the scar.

Since the publication of Whitehead's paper, his method of operating has been tested by many surgeons. The operation cannot be criticised on surgical grounds, as it is certainly the most perfect plan of treatment, surgically speaking, which has been proposed.

The immediate removal of the tumors, the coaptation of healthy tissues, and primary union, are substituted for slow strangulation by the ligature, or removal by the cautery and healing by granulation.

The applicability, or the necessity, of this operation in all cases of hemorrhoids is, however, open to criticism. If we accept Whitehead's views in regard to the pathology of piles, and believe that the whole venous plexus surrounding the anus and the lower end of the rectum, is in a pathological condition in every case of hemorrhoids, even though there may be present only one or two isolated tumors, then, of course, the complete removal of this area is indicated.

But that this view is not true, is proved by the thousands of cases which have been permanently cured by the ligature and the clamp. The method is, however, indicated in all cases of aggravated hemorrhoids where the vascular tumors cover the whole or the greater part of the circumference of the bowel. In such cases the operation is easy, and of great difficulties. Statistics show that it is at least as easy as removal by the ligature or the clamp, and it is followed by a more rapid convalescence and much less morbid after-effects.

DISCUSSION.

Dr. W. G. CARR. I have had the pleasure of witnessing only a small number of Whitehead's operations, but I fully agree, and I think that those who have tried the operation will fully agree with Dr. Penrose.

that the method of excising through the whole circumference of the bowel, the pile-bearing mucous membrane, and drawing down upon the upper segment and then attaching this to the lower segment without including the skin, has the advantages, first, of removing all possibility of return of the trouble ; and, secondly, as Dr. Penrose has stated, in making a clear, clean, linear incision around the circumference of the bowel. Nearly all of us have seen the immense amount of suffering which the older operations, by means of the clamp and ligatures, and even the cautery, have entailed. In the cases of the new operation, which I have seen, recovery has been rapid and complete. In one case, that of a woman well advanced in life, upon the day after operation, when I got to the house, I found her comfortably seated in a rocking-chair. The physician who had had the case in charge before the operation had given her freely of some medicine to open the bowels, and on the morning after the operation, without any pain, without any tenesmus, she had a large, well-formed motion. In the old method, in which for days the physician was called upon to administer opium, either by suppository or hypodermically, in large amounts, and in which the patient and the physician both looked forward with dread to the time — five, six, or ten days after the operation — when the bowels were to be opened, is by this method entirely obviated.

I have seen, in the few cases which I have watched, no pocketing or trouble about the line of incision. The two freshly cut surfaces unite very quickly — very much more so, it seems to me, than in mucous surfaces elsewhere. Even when the bowels were moved within twenty-four or thirty-six hours, I was surprised to find that there was no trouble.

It strikes me that the continued suture has advantages over the interrupted. Being introduced and made fast at one point, and then carried out and in around the circumference of the bowel, if catgut be used at the time when union usually occurs the suture is probably dissolved and passes away without any trouble ; or, if silk be used, by simply introducing the scissors and cutting close to the knot and giving an easy pull, the whole suture is removed without any pain or bleeding.

I must confess that the operation presents to me by far the best method of removing the pile-bearing membrane when it exists and involves one-half or more than one-half the membrane around the circumference of the bowel.

THE REMOVAL OF FRECKLES.—The *Pharmaceutical Record* quotes the following prescription for removing freckles :

R.—Sulphocarbonate of zinc.....	1	drachm.
Glycerin	2	ounces.
Alcohol.....	1	ounce.
Orange-flower water.....	1½	ounce.
Rose water, sufficient to make.....	8	ounces.—M.

Apply twice daily.

BUFFALO OBSTETRICAL SOCIETY.

MEETING held September 23, 1890.

Dr. C. C. FREDERICK presiding.

Dr. EUGENE A. SMITH read a paper entitled

REPORT OF CASES OF PUERPERAL FEVER.

By **EUGENE A. SMITH, M. D.**

Lecturer on Surgical Pathology, Niagara Medical College.

With only a few exceptions the medical men of the world are now agreed that the infectious disease formerly known as puerperal fever, is really puerperal septicemia, due to bacterial infection. The most sanguine and enthusiastic believers in the new pathology go so far as to declare that all post partum fever is due to bacterial infection carried to the patient by attendants or surroundings, and they hold the physician responsible whose patient develops a fever after childbirth. A smaller, more conservative class believe this opinion is too radical, and they lessen its all-embracing scope by the doctrine of auto-infection, saying a puerperal patient may contract puerperal septicemia by infection through the alimentary and respiratory tracts.

But, more than this, physicians should realize that many cases of puerperal fever cannot be grouped at all as cases of puerperal septicemia, and aside from the interest they may have, this is my object in reporting the following cases :

It may be said that the wounds of parturition are always followed by some fever during convalescence, although Case XV., a primipara, aged nineteen, had a temperature chart, showing morning and evening temperature for ten days, and the pulse ranged between seventy and eighty, and the temperature never exceeded 99°F. But Case IV., a primipara, aged twenty-one, on the sixth day had a temperature of 102°F., which fell when an enema relieved the constipation from which she suffered. Case XII., multipara, aged twenty-six, on the eleventh day had two degrees of fever, as a result of her bed being moved near a radiator. Its heat, perhaps, prevented the natural radiation of heat from her body, for upon removing her bed the ephemeral temperature fell. Case XL., primipara, aged eighteen, an unmarried mother, of slight build and neurotic, was found on the day after labor with a pulse of 120 : temperature, 104½. Finding her in tears over a reproachful letter which she had received, it seemed more reasonable to ascribe the

pyrexia to emotional disturbance than to sepsis, which would be exceptional upon so short an incubation. Several similar cases could be reported among the unfortunate unmarried women in the Edward-street Maternity, and the Sisters in charge have learned to recognize this ephemeral fever, which they call "Excitement or Nervous Fever." Case XLVI., primipara, aged seventeen, had right lateral and posterior laceration of the cervix after a labor antiseptically conducted. For two days she did well. On the third day, in the afternoon, without a chill, her pulse ran up to 120; temperature, 104; and she had cramp-like pains over the uterus and on the right side. Carbolyzed douches and anodynes were used. In the next three days the temperature and pulse fell, and she seemed to be normally convalescent. On the ninth day she again developed shooting pains on the right side, the temperature ran up to 104½F.; pulse, 124. Over the right ovary she could not bear the touch, and hardness from effusion was found to the right of the uterus. The cervix was nearly healed. Poultices and hot douches relieved the pain, and in two days the fever fell rapidly. Two weeks later it was noted that she felt a dragging, right-sided pelvic pain on first attempting to walk. In this case, considering the antiseptic precautions and the peculiar sharpness and short duration of the attacks, the pathological process was doubtless a pelvic cellulitis, produced by an extension of the curative inflammation from the lacerated cervix, and this inflammation terminated in resolution, no pathogenic germs having invaded the morbid territory. Pyrexia was caused by leucomaines and nervous disturbance. Mrs. M—— is a case which illustrates this point further. She is thirty-six years old, and has had six children. Her labors have been normal, with the exception of one miscarriage. There was no history of gonorrheal infection.

She was attended in her last labor, on November 10, 1889, by Dr. James S. Smith. The labor was somewhat long, but the final pains were very hard. Until November 17th the convalescence progressed normally. Then she had a chill, temperature 104°F., and pain to the touch over the uterus. In a few days the fever subsided, and on November 27th she was up and around, and was discharged. On December 9th, two weeks later, the pain returned, with temperature 101°F., and tenderness over the uterus. In a few days vaginal examination showed a tender, hardened mass behind and to the left of the uterus. From this time until April 12, 1890, the patient was confined to her bed, a condition gradually develop-

ing in the left side of the pelvis, suggesting to the touch a wooden block. At times her fever would disappear, only to return again with an extension of inflamed tissue, accompanied by bowel disturbances and hysteria. Meanwhile the patient did not fail in general condition. On December 29th, Dr. Herman Mynter saw the case with Dr. Smith, and on January 4th, January 29th, and March 9th, Dr. M. D. Mann saw her, and after careful needle exploration it was agreed no pus was present. On April 1st, after a week's use of electricity, pus was suspected from the occurrence of chill, fever and acute tenderness. Exploration followed by operation, evacuated pus which had developed below the broad ligament on the left side of the uterus, and worked to the pelvic brim, between the peritoneum and ileum. She made a rapid recovery. In this case pathogenic bacteria were presumably absent until pyogenic microorganisms appeared in the inflammatory exudate at the beginning of suppuration.

These cases of pelvic cellulitis are of a nature which makes it difficult to exclude septic infection, but they form a class which may be compared to cases of pelvic cellulitis, running the same course in the virgin, when, from traumatism or operation an injury to the vagina, uterus or ovary is followed by cellular inflammation, terminating in resolution, chronicity, or suppuration.

To avoid a prolix enumeration of cases, suffice it to say that other intercurrent affections, like malaria, mastitis, hypostatic pneumonia, the exanthemata, and others, could be cited as producing cases of fever after labor, which in their earlier stages were difficult to diagnose from pyrexia due to sepsis. Later, however, they were readily classed as complications of the puerperal state.

Next in this report are some undoubted cases of puerperal septicemia. The first is a case of auto-infection, occurring in the Buffalo General Hospital, during the service of Dr. C. E. Ernest. Miss —, aged eighteen, entered, giving a history of prostitution and infection with gonorrhea several months before pregnancy. Labor was normal. High fever began at once, and in the succeeding four days she developed a severe peritonitis and died. A post mortem revealed no vaginal or uterine trouble, but a double pyosalpinx and a purulent peritonitis. One ovary and tube were found bound to the uterus by inflammatory bands, and during the contractions of labor, pus had no doubt been forced into the peritoneal cavity, thus causing the immediate onset of an unavoidable case of septic fever.

Similar cases of purulent peritonitis have occurred in the non-pregnant woman, from extension of purulent gonorrheal salpingitis. In the puerperal as well as in the unimpregnated woman, such cases are properly gonorrheal septicemia, and should be so designated, to insure accuracy of statistics in the first place, and then to relieve the physician from the censure implied in the name puerperal fever.

Cases V. and CXXXIII., primipara, were patients with vaginal diphtheria. Intra-uterine extension of the trouble and pyemia were prevented by vigorous cauterization with chloride of zinc. Both patients had fever, chills and rapid pulse, with marked abdominal pain. One had a small pelvis, and to complete the labor it was necessary to apply the Tarnier forceps above the pelvic brim. The diphtheritic process ran its course in a laceration of the perineum and vagina. A point of interest in her case was a heart murmur due to valvular lesion, remaining after an attack of rheumatism, which occurred in the fifth and sixth months of pregnancy. Her pulse before labor was 120, and intermittent. She had unusually high temperature during the sepsis; for three days between 105° and 107°F., and her pulse ranged between 140 and 160. As an internal antiseptic, sodium salicylate seemed to have an especially happy effect.

Case CXIX., primipara; aged nineteen; confined in the Lying-in-Hospital, on Edward street, had a tedious labor, the cervix descending in front of the head, and becoming edematous and thick. With much difficulty the swollen lips were pushed up and the head allowed to come down, the labor being then naturally completed. The cervix was lacerated laterally and posteriorly. This patient was sick in one room, and another patient, fifteen feet away, whom I was attending, was also in labor. In examining, I used the right hand for one and the left hand for the other. The latter patient made an uninterrupted recovery. The former developed a temperature of 104°F., and a rapid pulse on the third day. The cervix was found widely open, the uterus soft, its internal surface rough and friable. Intra-uterine douches were used every three hours. On the eighth day, the fever not abating, she had a long chill. Liquid nourishment and stimulants she took freely. She had occasional abdominal pain, with but little tympanitis. Antipyretics and douches did not reduce the temperature below 104°. Twice her temperature was 107°. She had two severe chills. On the seventeenth day the left knee-joint developed symptoms

of arthritis, and next day the joint was aspirated, and found to contain a thin, purulent fluid. On the nineteenth day she died from exhaustion. This case was one of septic metritis, with pyemia resulting. Its origin was easy to trace. Four days before her labor another practitioner had confined a private patient in the institution. Two days after, she began having fever, and my nurse assisted in caring for her. When my patients began having labor pains before my arrival, the same nurse examined the woman who afterward had sepsis, but did not examine the other. The first septic case died on the seventh day, of purulent peritonitis, when my patient was exhibiting the first signs of her fatal malady. Before and since these cases there have been no deaths from sepsis in the institution while under my observation, a period covering two and a half years.

That much remains to be done by bacteriologists and pathologists in the classification of the septic puerperal disorders, can readily be seen from the varying etiology, symptomatology, and rational treatment of the few cases reported from my short experience. But, while all authors make some attempt at classifying the bacterial puerperal diseases, I can find no mention made of non-septic post partum fevers except in *Hirst's American System of Obstetrics*. Here part of one chapter is devoted to the "Non-infectious Fevers" of the puerperal state.

That such non-infectious fever often complicates the lying-in period, there can be no doubt, and the contribution of these cases is made in the interests of a clearer nomenclature. A differential diagnosis can be made between puerperal septicemia in its various forms and the non-infectious puerperal fevers, including traumatic cellulitis, emotional fever, constipation fever, and other ephemeral reflex febrile conditions, as well as the fever resulting from more severe intercurrent diseases.

DISCUSSION.

DR. MARCEL HARTWIG: Have found the puerperal form of septic fever the most common, with and without bad odors, due to the different forms of bacteria. The gonorrheal form is another kind. I think that in time several new diseases will evolve out of puerperal fever. I have always taken the utmost care against admitting germs. I believe in auto-infection, and have had a case in which it occurred through the vagina.

DR. W. S. TREMAINE: I have clinically recognized the various forms of puerperal fever, and can see why these forms exist. The term puerperal fever should be abolished. I think that we can differ-

entiate between ephemeral, pyogenic, pyemic and putrid forms of this fever.

Dr. DELANCEY ROCHESTER: I think it almost necessary to take the temperature before, as well as during and after confinement, in speaking about puerperal fever.

Dr. LOTHROP: I think that the experience at the Maternity Hospital, where the mortality has fallen to nearly nothing, shows clearly enough the necessity of antiseptic measures before, during and after parturition.

Dr. C. C. FREDERICK: I have in my experience seen cases of non-septic fever in young unmarried women due to excitement. I have seen cases of high temperature without any cause, also cases in which the fever would be due to malaria, with chills and remission lasting several days.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON ORTHOPEDIC SURGERY.

STATED meeting, October 17, 1890.

V. P. GIBNEY, M. D., in the chair.

NON-UNION OF FRACTURED RADIUS.

Dr. C. A. POWERS exhibited a patient in whom this condition had existed for many years, and also showed an extension apparatus which had given relief. The first fracture occurred twenty-nine years ago, at the junction of the middle and lower thirds. A refracture took place eighteen years later, and united with deformity and disability. The radial nerve had become involved in the callus, and this gave rise to such intense pain that she underwent an operation for its relief five years later, in which the bone was again fractured. All attempts to cause this fracture to unite failed. When she came under the care of the speaker in May of the present year, it was found that the carpus had slipped upwards with the lower fragment of the radius, and had caused the ulna to project very forcibly against the soft parts, giving rise to much pain in the region supplied by the ulnar nerve. As further operative measures were not deemed advisable, a simple extension apparatus was applied, and had answered admirably.

Dr. A. M. PHELPS said that he thought it had been wisely decided not to subject the patient to further operation, as fractures of the radius and of the lower third of the tibia were peculiarly

prone to non-union. Out of about 300 osteotomies, he had had only one case of non-union, and that was after an operation for the correction of an anterior tibial curve. Operations by himself and others had failed to bring about union. Thomas, of Liverpool, claimed that such fractures could be made to unite by pounding the parts with a mallet; but in his experience this method had not proved successful, and he thought that where there was muscle between the ends of the bone, and the peculiar ivory-like condition of the ends of the bone, which was not uncommonly present, none of the methods heretofore proposed were likely to prove successful. He had very recently proposed and performed a new operation, which he thought might prove successful. It consisted in cutting down upon the ununited fracture, freshening the ends of the bone, and grafting in between them a part of the forearm of a dog, both patient and dog being secured in plaster of paris. When the graft had united firmly, the dog's leg would be amputated, and the skin flaps of the dog united to those of the patient.

HIP-JOINT DISEASE AFTER TYPHOID FEVER.

Dr. J. Mc. G. WOODBURY presented a girl of eleven years, who six months after a severe attack of typhoid fever was found to have some limitation of motion and pain at the right hip, with distension of the capsule. Flexion caused lordosis, and some pain. She was treated by counter-irritation over the joint, and a plaster of paris spica bandage, and was allowed to walk around upon a high patten, with crutches. Now, after a period of eight months, there was no pain.

A CASE OF OSTEO-MALACIA.

Dr. WOODBURY also presented a case of this nature. The patient had lived in Switzerland until twenty-six years of age, and had suffered considerably from exposure during the late war. On October 26, 1886, when forty-three years of age, he sustained a fracture of the surgical neck of the left humerus, and between that date and May 26, 1890, he received five other fractures, viz., two of the left humerus, two of the right humerus, and one of the left clavicle. Most of these fractures were caused by very slight falls. During the last three months, but more particularly since the first of last August, a tumor has been rapidly growing between the sides of the two fractures of the shaft of the right humerus. Two small tumors may be observed upon the clavicle, one at the point of the fracture, and the other to the inside of it. A specimen removed from the

large tumor with a harpoon was sent to Dr. J. S. Ely for microscopical examination, and he reported that it contained "polyhedral cells, and occasional large spindle and giant cells." He adds, that this "speaks very strongly for sarcoma." A loud murmur, similar to that heard in aortic aneurism, is audible over the large tumor. Dr. Woodbury said that as in cases of tumor of the middle of the spinal cord, osteo-malacia, due to trophic disturbances, is one of the early symptoms concurrent with disturbances of sensation, he had referred the case to Dr. E. A. Starr, with the hope of learning more about the etiology of this interesting condition. Dr. Starr examined the patient on two or three occasions, the last time only a few days ago, and had reported that there was no central lesion of the cord. The patient had had no pain with the fractures, or upon re-setting these bones, and this, together with the fact that there had been no fractures of the lower extremity, seemed to favor the view that the condition was due to a syringe-myelia, or tumors of the cord.

Dr. POWERS said that Dr. Woodbury's case of multiple fracture with tumors was very similar to a case of multiple sarcomata which he had recently presented to the Surgical Section.

Dr. V. P. GIBNEY thought the pulsation in the tumor might be due to the condition of the tumor itself; in other words, it might be a pulsating sarcoma.

ANKLE JOINT DISEASE.

Dr. A. B. JUDSON presented a case of this disease which he said was interesting, because the child had suffered from this condition almost all her life. The disease began at the age of one year, and she is now about seven years old. Notwithstanding that she had been under mechanical treatment only two years, she had recovered with but little disability and deformity. There was considerable lateral motion at the ankle joint; extension was almost normal; flexion was arrested at about ninety degrees. Scars on both sides of the ankle showed where abscesses had opened spontaneously. There was a difference of one inch between the two calves, and the shortening amounted to only a small fraction of an inch. This result had been obtained by the use of a simple brace, and without resorting to any operation.

Dr. JOHN RIDLON presented an astragalus, which had been removed by Dr. B. Farquhar Curtis from a child which had been brought to the speaker when only six weeks old. He had faithfully

tried stretching, and the various retentive appliances, during a period of one and a half years. Dr. G. S. Huntington had then operated by Dr. A. M. Phelps' open method, but without improving the condition. The specimen which he presented was interesting on account of two bony prominences which it showed, and which apparently had been the obstacle to flexion of the foot.

THE TREATMENT OF ANKLE-JOINT AND TARSAL DISEASE.

The paper of the evening, with the above title, was read by Dr. T. Halsted Myers, who also presented a patient illustrative of this subject.

Dr. MYERS said that tubercular inflammation might attack, first, the synovial membrane, later the cartilage, and lastly the bone; or the primary local focus might be in the bone.

While it was still confined to the synovial membrane, a number of surgeons recommended erosion. If it had attacked the bone, many more urged operative methods, irrespective of the general health of the patient. The author considered only the latter condition.

Simple incision was of no advantage, for we had no element of tension, as in acute processes, and we only opened new channels of infection, leaving the original disease unchanged.

The usual method of treatment, curetting the abscess walls and the sinuses, could not be expected to remove all disease, and would greatly increase the risk of absorption. The success which had been secured in some of these cases seemed to be due to the power of the antiseptic agent to render inert the bacilli which remained.

The rational method was to remove all the disease at once; but apparently healthy bones contained tuberculous foci, and hence, it was a most difficult problem to know when to stop, and, in fact, this could not be determined at the time of operation. If all the disease were successfully removed, the duration of treatment was less than under conservative methods. The ultimate results were, however, less satisfactory. He had seen a considerable number of misshapen and atrophied feet after operative treatment, which were weak and painful, and required support to render them able to bear the weight of the body. He had not observed such results from conservative treatment. It was confessedly difficult to ascertain the ultimate results; and although Dr. Shaffer had kindly placed the records of the New York Orthopedic Dispensary at his service, he had not

been able in the short time at his disposal to do more in most of the cases than quote the histories.

The number of cases treated before July, 1888, was fifty-five, and of these he knew personally that at least twenty-one were cured. Five were cases of synovitis, and sixteen of osteitis. The average duration of treatment in the latter was twenty-one and a half months, the longest case being under treatment fifty-five months. The results in all were extremely good; yet, under careful private treatment, still better results should be expected.

From our knowledge of the various ways in which the bacilli of tuberculosis may be spread in the body, it would seem that a primary tubercular process in a joint must be extremely rare. Drs. Prudden, Northrup, Biggs, and Thacher, to whom he had written for information on this subject, all considered that these affections were generally secondary, but agreed that primary joint lesions did occur. The practical importance of this was that the danger of general infection from a joint lesion which was not interfered with surgically, was an entirely unknown and probably extremely small quantity.

Of the whole number treated (fifty-five), but three had died — one of diphtheria, one while tarsal disease was active, and the other, six months after, a note of "nearly cured" had been recorded. In neither of the latter was the cause of death stated. However, in Dr. Scudder's report of eighteen cases of excision, six deaths occurred; three were due to the operation, or its direct effects; another might have been; and the other two were from tuberculosis, but occurred one and two years after the operations.

The treatment of synovitis consisted in absolute protection of the joint from traumatism. In children, he considered a perineal crutch absolutely necessary while walking. Ordinary crutches were invariably laid aside at times, and the joint left unprotected. In addition to this crutch, the foot should be protected by a splint, to avoid local injuries and to maintain a good position. There being no involuntary muscular spasm, while the disease was confined to the synovial membrane, traction was not necessary.

In cases of osteitis, the same protection of the joint was imperative, and if there were pain and spasm, indicating the necessity for traction, this could be applied at the ankle by means of a Dow's brace, or the apparatus of Dr. Sayre or Dr. Foster.

The application of adhesive plaster to a painful ankle required more care than a dispensary case was willing to give, especially

when abscess was present. For this reason he had found it most serviceable to employ a leg brace, or plaster splint, worn constantly, and a perineal crutch for walking, which could be laid aside at night: or the Dow's brace, as modified by Dr. Shaffer, might be used.

Abscesses should be left entirely alone, and the sinuses simply kept aseptic. After the joint was considered cured, it was well to wear an ankle brace for some months, to prevent twists. The malpositions found in the acute stages were almost entirely due to muscular spasm, and did not require tenotomy, or other operative treatment.

In the later stages there might be bony changes, and these, if not painful or progressive, did not require treatment. However, if these conditions did exist, and yet there was no evidence of active disease, an attempt should be made to restore and preserve the normal relations of the parts.

The value of hygienic surrounding during the treatment of these cases could not be overestimated. His observations had been made on children only, and for contrast an extended series of cases in the adult would be very valuable. Without exception, every one of his cases of ankle-joint or tarsal osteitis in children had done well under conservative treatment, and he had yet to see the case which he would condemn to erosion or excision.

Dr. N. M. SHAFFER said that his own experience led him to think that one point in Dr. Myers' paper should be particularly emphasized, *i. e.*, the necessity of absolute protection of the articulation. He had accomplished this in practice, whenever possible, by the use of a modification of Dow's brace, and had found that adhesive plaster was rarely required, as a well-fitting shoe made efficient counter-traction. He thought that the further removed the tuberculous joint was from the center of the body, the more benign was the disease, and the less danger of general infection: and he was inclined to speak more strongly of the conservative treatment of ankle-joint disease than of any other articulation in the body.

Dr. RIDLON thought these cases did well with the Dow's instrument: but with this, as with some others, we could not secure immobilization, but only protect the joint from the jar of walking. He had seen such excellent results in cases of suppurative ankle-joint disease, without any treatment whatever, that he

often doubted how much of a good result could be attributed to the treatment received.

Dr. H. W. BERG said that he had had such good results in the treatment of phthisis by the administration of the bichloride of mercury in doses of one-twenty-fourth of a grain, three times a day, that he was inclined to believe the old theory, that tuberculosis was really a change in the syphilitic virus due to passing through several generations. He considered that splints like Dr. Judson's were imperfect, for, by taking their bearing from the outside of the foot, intra-articular pressure was increased. To diminish this pressure, the foot must be adducted and rotated inwards.

Dr. PHELPS was of the opinion that the vast majority of these cases were cured by immobilization and relief of intra-articular pressure, but in suppurative cases he believed that the soundest and most scientific surgery demanded operative measures. If we could protect the hip-joint as well as the ankle-joint, we ought to get equally good results in hip diseases. He believed that these cases were inoculations of pathogenic germs on a diseased surface, and that they were purely local.

Dr. R. H. SAYRE exhibited a splint which his father had devised for an adult with ankle-joint disease. He agreed with Dr. Ridlon, that it was difficult to apply traction at this joint, but he thought this splint solved the problem. His views regarding the prognosis and treatment of this disease were in accordance with those just expressed by Dr. Phelps.

Dr. SAMUEL LLOYD said that fifteen cases of adult ankle-joint disease had been treated in the New York Post-Graduate School by this so-called conservative method, but the relapses had been very frequent, and he thought this method was less likely to yield good results in adults than in children. In answer to questions from the chairman, he said that several of the cases were due to injury, and a number of them were suppurative, while four were recorded as synovitis. Two of the cases had been discharged as cured before 1883, and were known to be well in 1889.

Dr. JUDSON protested against the statement that cases of disease in the ankle should do equally well without treatment, although neglected cases of ankle-joint disease would have nothing like so bad a deformity as those at the hip.

Dr. H. L. TAYLOR also spoke about the different mechanical conditions present at the various joints. The weight of the limb exerted great leverage upon the joint, especially in a spasmodic condition of the muscles. It is more marked at the hip than at the knee, and very much more noticeable than at the ankle. He referred to a case of ankle-joint disease occurring in a distinctly phthisical subject, where the sinuses were treated by injections of a saturated solution of iodoform in ether. The beneficial effect upon the healing process was almost magical.

Dr. GIBNEY said that about ten years ago, the surgical section of the "Therapeutic Society" of this city spent about two years collecting data relative to the comparative results obtained by the operative and non-operative treatment of this condition; and the conclusion was, that the conservative method yielded the greatest number of useful ankles, even in cases where the foot was seen with cicatrices. There were two or three operative cases, having a high degree of equinus, and a stiffened and shortened joint, and one or two flail joints were also shown. In his experience, cases of adult ankle-joint disease relapsed again and again on the slightest provocation; later on, abscesses would appear; still later, pulmonary signs would develop, and then amputation would follow. As regards the mercurial treatment of tuberculous disease of the joint, he need only call attention to the fact that many years ago the routine treatment for these cases at the Hospital for Ruptured and Crippled, was one-twenty-fourth of a grain of the bichloride of mercury in tincture of bark, three times a day; and the results attained by this treatment were certainly far from striking.

CALCAREOUS DEGENERATION OF THE HYPOPHYSIS OR PITUITARY BODY.

SPECIMEN shown before the Pathological Society by William C. Krauss, M. D.

Name, Theodore Oliver; age, forty-eight years; occupation, tanner; constitution, strong, robust; gave no history of syphilis or tuberculosis, and considered himself a healthy man. In 1880 he passed through some disease of the kidneys, the nature of which could not be ascertained, and supposed himself fully recovered. In July, 1888, he began to complain of pain in the back and base of

the head, but still continued his work as cartman. The headaches becoming more severe,—“terrible,” as he expressed them,—with attacks of dizziness, neuralgias, and sudden failing of the eyesight, he consulted Dr. Hubbell, of this city, whose examination I here append :

Vision of both eyes impaired, but that of the left eye most. Vision of the right eye equalled No. 12 D of Snellin's test types at five meters, or $V=5-12$. With a $+0.75$ D glass he could read a few letters of No. 5 (5-5 partly). With the left eye he could read No. 24 at five meters (L, $V=5-24$), and glasses aid did not make any improvement.

Both visual fields were contracted, especially at their outer parts (temporarily). The visual field of the right eye was almost entirely lost in its outer half, while that of the left eye was only partially lost. The patient thought he was nearly blind in the right eye, and yet this was the eye in which the vision was much the better. With $+2.5$ D glasses, he was able to read No. 1 Jaeger's test types at eight inches.

Ophthalmoscopic examination showed the margins of the optic discs somewhat indistinct and fuzzy, while the surfaces of the discs were markedly pale, especially at their outer halves. The vessels were diminished in size, but otherwise normal. The rest of the fundus was in a normal condition. The appearances of the discs were those of a receding optic neuritis and resulting atrophy.

The double optic neuritis, passing into atrophy of the optic nerves, taken in consideration with the dizziness and excruciating headaches, led me to diagnose a tumor of the brain. The bilateral temporal hemianopsia, partially apparent on the left side and well defined on the right side, suggested its location at the base of the brain, and involving the optic tracts or nerves near the chiasma.

The pain soon spread over the whole head, and he suffered much from a sense of fullness and dizziness. About February 1, 1890, the pain became so severe that it was necessary to inject, hypodermically, one grain of sulph. morph. three or four times daily.

August 1, 1890, the pain again became severe, and continued so until August 4th, when he became comatose, and remained so until his death, the following day.

The brain, as received, was in an advanced state of decomposition, but by immersing it immediately in absolute alcohol, enough of the base was preserved to show the tumor and its surroundings.

Macroscopically the attention is directed at once to the marked increase in size of the pituitary body. Situated normally in the sella turcica, it rarely ever exceeds in size a bean or large pea. At the base of the brain it is found directly caudad of the optic chi-

asma, and forms the cephalic boundary of the trigonum intercrurale. In this case, it attained the size of a large marble, producing pressure upon the chiasma cephalad, and caudad—it was partially planted in the space between the crura cerebri. On cutting the periphery a gritty, rasping sound was heard, and on cutting deeper the scalpel came in contact with a hard stony substance. The cut surfaces were chalky white, with many glistening points, and crumpled into minute particles.

On examining under the microscope, minute crystals could be seen throughout the field, while the larger particles appeared dark by transmitted light, white and glistening by reflected light.

On adding a drop of strong nitric acid under the cover-glass, these calcareous masses (carbonate of calcium, phosphate of calcium,) dissolved, and the evolution of carbonic acid gas could be distinctly seen under the microscope. After a short lapse of time the field was full of bubbles of gas, some larger and some smaller, positive evidence of the presence of the carbonate of calcium.

For the specimen and symptoms I am indebted to Dr. Hubbell of this city, and to Dr. Witter of Wellsville.

Translations.

CURE OF EPITHELIOMA OF SEBACEOUS ORIGIN BY RESORCIN. By Dr. W. Chasseaud (*Bulletin Général de Thérapeutique*, Sept. 15, 1890. Page 207).

Under the title of Resorcin in Epithelioma of the Face, the *British Medical Journal*, of July 12, 1890, page 96, publishes the following: "Dr. Mario Luciani cites two cases of cutaneous epithelioma, in which he is said to have obtained a complete cure by the application of an ointment, composed of resorcin and vaseline. In one of these cases the patient, a woman of fifty-five years, had had a red nodule on her forehead for four years. The little tumor began to grow and ulcerate. The borders of the ulcer were indurated, and had a foul base. The disease progressing, and the patient not willing to submit to a surgical operation, the doctor applied to the ulcerated surface, after washing with a two per cent. solution of borax, an ointment composed of thirty grammes of resorcin and 100 grammes of vaseline. In the space of a month the

ulcer took a healthy appearance, the borders softened, the sensation of heat and the lancinating pains disappeared. After three months of this treatment, the ulcer was completely cicatrized. The second case was a woman of sixty years, who for a year had suffered with a little tumor, situated upon the upper lip near the angle of the mouth, to the right. This tumor ulcerated in the same manner as in the preceding case. The same treatment was followed, with an equally happy result.

In the *International Journal of Medical Sciences*, VII., 1885, a case of epithelioma is reported by Dr. Rubin Antonio, in which a cure was obtained by the application of resorcin. The epithelioma, situated on the side of the nose, was about the size of a pea, and was accompanied by considerable hyperemia and infiltration of the skin. The neoplasm was washed twice daily with a solution of permanganate of potash, and the resorcin was applied in an ointment composed of fifteen parts, to twenty of vaseline, the tumor disappeared gradually, and at the end of five months there remained nothing but an insignificant cicatrix.

In May, 1886, I was called to see a case of epithelioma, situated on the right side of the nose, extending upward to the lower lid. Two years before, the woman had had a small tumor, which had ulcerated and had undergone several treatments for its removal, but without success. She had been seen by several physicians who pronounced it an epithelioma, and urged an immediate operation.

On showing the cases mentioned above, cured by resorcin, I insisted upon its being tried in this case. A microscopic examination presented all the characteristics of a lobulated epithelioma of sebaceous origin. At the end of a week the cancrroid had increased somewhat in size, the neighboring parts had become ulcerated, but it had lost its granular aspect and presented an appearance of healthy tissue. The constant application of resorcin, which at first had been well borne, now began to produce severe pains. At the end of a month the patient refused to continue the treatment. The resorcin was suspended, and an ointment of oxide of zinc was applied. At the end of eight days, cicatrization began, and the whole ulcer was covered with healthy epithelium, save the left border toward the nose, and the upper border near the lower lid. The resorcin was again applied, and at the end of another month was succeeded by the oxide of zinc ointment. The same phenomenon was observed as before, *i. e.*, rapid cicatrization of the ulcerated parts. Since then I have repeatedly seen the patient, who has suffered no return of the disease.

Towards the end of the same year I saw a woman, about sixty years of age, who had been operated upon two years before, for an epithelioma of the left side of the nose, but without avail. She had applied, for a long time, ointments of boric acid, and of arsenate of soda: had been cauterized with nitric acid, with mercury, with the thermo-cautery, etc., the only result being an increase in the size of the tumor. I promised to cure her, and instituted the same treatment as in the preceding case. The same phenomena were reproduced, the ulceration increased at first under the influence of resorcin, and cicatrization took place rapidly under the oxide of zinc treatment. At the end of three months, she was completely cured, and has remained so until this day.

The third case of epithelioma which I have cured by resorcin, was situated on the right temple. Cicatrization was complete, but at the end of a short time a small point began to ulcerate; six months' treatment was necessary to obtain a radical cure, which still persists. Since then I have treated eight cases of the same kind with the same success, save in a single case. In all these cases I have observed that the extent of the ulceration produced by the resorcin, was in direct ratio to the extent of the infiltration. When the tumor is of recent origin, the resorcin causes it to disappear without enlarging it. In these last cases, I have abandoned the permanganate of potash wash, also the oxide of zinc ointment, and have replaced the latter with a simple ointment, with the same happy result. The unsuccessful case was a man about fifty years of age. The epithelioma was situated on the upper and anterior part of the nose, and had invaded the lower lid, completely destroying the caruncle and part of the lachrymal duct. Cicatrization had been obtained everywhere, except near the lachrymal duct, where the resorcin, on account of its irritation to the eye, had to be suspended.

W. C. K.

A FEW POINTERS ON THE METHOD OF URETHRAL INJECTION.—Never use a glass syringe. I give preference to Goodyear's rubber syringe, which has a bulb shoulder on its nozzle, thus preventing the nozzle from entering too far into the urethra. Warm the injection fluid before using. Do not overfill the urethra. Never stroke the under surface of urethra after injecting, as is advised in the books. Never use injections until the acute stage is passed. Never give injections which irritate or burn.—*Mac Connell in Times and Register.*

Progress in Medical Science.

SURGERY.

CONDUCTED BY

JOHN PARMENTER, M. D.

DRY TREATMENT OF OPEN WOUNDS AND ULCERS.

BYFORD (*Annals of Surgery*, October, 1890,) contributes an original memoir upon the Dry Treatment for Open Wounds and Ulcers. He made experiments in order to find "a method of cure for open wounds that would operate somewhat in the same manner as the closure and healing of incised wounds by primary union, viz., without sepsis and without suppuration." He discarded germicides, and strove to imitate nature by drying the wound, and keeping it so, or when this was impossible to drain off the fluid so constantly that the same fluid would not remain in contact with the diseased surfaces, and thus allow the development of germs in it. The method was applied to suppurating wounds, as well as fresh, and consists in having abundant capillary drainage from *every* part of the wound, the drainage material to be changed before saturation is reached. Coincident with each dressing, the neighboring surfaces are cleaned, the wound dried, and new material for drainage reapplied. The author then gives the detail of six cases, comprising an abdominal oöphorectomy for abscesses of Fallopian tube and ovary, removal of suppurating kidney by laparotomy, mole removed from temple, bed sore, abscess of abdominal wall following laparotomy, and suppuration following Alexander's operation, in all of which the method worked to his complete satisfaction. He uses it constantly in fresh wounds, where it is applicable, in laparotomies after the second or third days, gauze replacing the drainage-tube, and for venereal sores between the times of cauterization. The dressings require to be changed oftener in suppurating wounds than in fresh, the intervals varying from every four to every six, eight or twelve hours according to the circumstances of the case. Gauze is preferable to absorbent cotton in large wounds. The latter, however, is applicable to most cases. The author sums up as follows :

1. Secure a large external opening.
2. Change the dressing often enough to prevent an accumulation of moist discharge.
3. Dry off the surfaces at each dressing as perfectly as possible.

4. Place absorbent material firmly against every part of the raw surfaces, but leave the packing loose in the middle so that the cavity may more readily contract.

5. Place an abundance of absorbent material over the wound, so as to be in direct contact with the packing, no powder or drug intervening.

6. Use clean absorbent cotton for small wounds, gauze for large ones.

7. Cleanse the neighboring skin at each dressing with dry absorbent material, or wash it with alcohol, but allow no water, or watery solution, to come in contact with the wound or its surroundings.

LAPARATOMY FOR PERITONEAL TUBERCULOSIS.—Lauenstein (*Centralblatt für Chirurg.*, 42, 1896) offers some suggestions upon the rationale of laparotomy for the cure of peritoneal tuberculosis. He thinks the withdrawal of the coëxisting ascetic fluid stops the further progress of the malady, for the reason that the peritoneum is made dry, which condition is incompatible with the development and existence of the tubercle bacilli, and that, therefore, the cure of the tuberculosis, and the non-appearance of the ascites after laparotomy, stand in direct relationship. Furthermore, Koch's experiments show that sunlight quickly kills all bacteria growing upon a culture medium, and the tubercle bacilli in from a few minutes to one hour. The author then argues further that, inasmuch as a thorough examination of the abdominal cavity requires a good light, and that many cases are operated upon at a time of day when the light is the greatest, and that the operation room is usually very light, the direct action of sunlight may exercise a curative influence along with drainage. This supposition gets some support from the fact that in no other form of tuberculosis is incision and drainage followed by cure, and in no other form is direct sunlight used as in laparotomy.

The author concludes with the narration of a case of peritoneal tuberculosis, in which he made laparotomy, drained off a large amount of ascetic fluid, and wiped out the cavity without using antiseptics. He then allowed sunlight to fall in every part of the cavity for ten minutes. The fluid did not reappear, and the patient remains well now, two months after operation.

LOCAL ANESTHESIA.—Dr. A. Dobisch, of Zwittern, recommends spraying the parts for one minute to induce local anesthesia, with

the following: chloroform, 10.00; ether, 15.00; menthol, 1.00. The anesthesia is complete, and lasts from two to six minutes.—*International Journal of Surgery.*

OPHTHALMOLOGY.

CONDUCTED BY

ALVIN A. HUBBELL, M. D., Buffalo, N. Y.

BORACIC ACID WITH MASSAGE IN DISEASES OF THE CONJUNCTIVA.—Dr. W. M. Beaumont recommends rubbing the conjunctiva with finely powdered boracic acid in granular and follicular conjunctivitis. He everts the upper lid in the usual way, and sprinkling the exposed conjunctiva thickly with the powder he rubs it into it for five or ten seconds with the end of the index finger. The acid then remaining may be washed away with a soft brush dipped into "lead lotion," or if there is not much discomfort it is allowed to remain. The lower lid is then treated in the same way. At first the applications are somewhat painful, but afterwards less so. Pain may be prevented by using cocaine beforehand. The treatment may be repeated every day, or every two days. After two or three applications the conjunctiva presents a healthy reaction.—*Lancet*, October 18, 1890.

PILOCARPINE IN OCULAR THERAPEUTICS.—Dr. G. Staderini, after making many experiments with pilocarpine, has arrived at the following conclusions: Subcutaneous injections of gr. $\frac{1}{16}$ to $\frac{1}{8}$ of the nitrate of pilocarpine are useful in several inflammatory diseases of the eyes, and especially in those that are the consequence of rheumatism, as episcleritis, iritis, and iodiophathic optic neuritis. They subdue inflammatory conditions of the iris and of the ciliary body which supervene when masses of the cortical substance of the lens remain in the anterior chamber after the operation of extraction of cataract. Further, they facilitate the absorption of these residual fragments; and they promote the absorption of non-organized opacities in the vitreous humor, especially when these opacities are the consequence of recent infiltration. The last-named effect is the most valuable of all the actions of pilocarpine. Improvement of vision also takes place after pilocarpine injections in cases of progressive myopia, and in cases of detachment of the retina, though the effects here are only transient. Lastly, they

may be employed with good effect in certain forms of amblyopia, and of amaurosis of unknown origin, but which are probably the consequence of disorder of the circulation followed by serious transudation in the sensory nerve centres.—*Annali di Otolmologia. Therapeutic Analyst.*

TREATMENT OF TRACHOMA WITH BICHLORIDE OF MERCURY.—Drs. Gust and Otto Keining (*Deutsch. Med. Wochen.*, Oct. 9, 1890,) advocate a method which they say they have found so efficient that cases which have been under treatment by other means for long periods have been cured in from two to six weeks, even when there has been extensive pannus. The eye is first thoroughly irrigated with corrosive sublimate, 1 to 3,000, and then the lids are everted and firmly rubbed with a hard pad soaked in the same solution. If the ocular conjunctiva is affected, it is treated in the same way, any bleeding from granulations being disregarded. The friction employed is proportionate to the severity of the case. When the granulations are so firm that the friction does not evacuate their contents, they are torn open with toothed forceps, or emptied by being squeezed with cilia forceps. The treatment is repeated daily. Some reaction follows, but this need not prevent a repetition of the process. There is always rather free secretion at first, but this disappears after the third to the fifth day of treatment. To remove the secretion, the eyes are bathed for an hour three times a day in a warm solution of the bichloride, 1 to 10,000, and the same plan is employed whenever there is itching of the lids. If the swelling of the lids becomes considerable, the treatment is discontinued, and the lids are brushed with the milder antiseptic. Sometimes at the commencement of the treatment membranes form on the conjunctiva; these should be allowed to come away spontaneously, and the conjunctiva touched only where it is free from them.—*British Medical Journal*, Supplement, October 25, 1890.

GRAEFE'S LID-SIGN IN EXOPHTHALMIC GOITRE.—Dr. Sharkey, at a recent meeting of the Ophthalmological Society of the United Kingdom, (October 16, 1890,) presented the results of investigations on this subject which he had made upon 613 cases. Graefe described this sign in 1864 as an absence of correspondence between the movement of the lids and the elevation and lowering of the vis-

ual planes, and considered it pathognomonic of exophthalmic goitre. Sharkey's cases included diseases of all kinds other than exophthalmic goitre, and out of the 613 cases, twelve, or a little less than two per cent., presented the sign well marked. Many others showed it so long as they stared at the object held before them. "A large proportion of healthy people can voluntarily produce the lid-sign in themselves by staring." Inasmuch, then, as Græfe's lid-sign is far from always being present in undoubted cases of exophthalmic goitre, and is often very well marked in others who certainly have not this disease, it cannot be considered very valuable as a diagnostic sign.

Correspondence.

Letter from Dr. Henry O. Marcy—Apostoli's Latest Conclusions on the Use of Electricity in Uterine Myomas—Abstract of His Paper at the Berlin Congress.

THE following letter from Dr. Marcy is published as a preface to the Apostoli treatment, for the information and benefit of our readers, and as a fitting introduction to the subject :

Editors Buffalo Medical and Surgical Journal :

Since the Apostoli method of treatment of uterine myoma by electricity engages at the present a prominent share of attention by the readers of the JOURNAL, I send you a translation of Apostoli's conclusions, as given at the late Berlin Congress, which I have not seen published, and which was given me personally by the author. Conclusions as to results may differ, but I am glad to bear testimony to the earnest, impartial, conscientious spirit of scientific investigation which pervades all of Apostoli's work. I was too incredulous to even give the method a trial until after his visit to America three years ago. Since then I have made about 1,000 applications of the constant galvanic current in cases of uterine myomata, with varying results ; with one exception, I am sure without harm, and this doubtful if referable to electricity. I am convinced the cases should be carefully selected, and fortunately the class where the greatest good is likely to follow is that least amenable to surgical treatment, the growths filling the pelvic cavity. The intrapolar current must traverse the growth in order to modify its nutrition. The menorrhagic cases are almost without exception benefited.

HENRY O. MARCY.

116 BOYLSTON STREET, BOSTON, Nov. 1, 1890.

Dr. Apostoli gave a lecture at the Congress, of which the following are his conclusions:

1. The constant galvanic current finds its principal indication in gynecology in endometritis and fibroma, regulating the circulation and controlling amenorrhea, dysmenorrhea, and metrorrhagia. It is of value in stopping the evolution of benign neoplasms, and aids in the resorption of the peri-uterine exudates. It exercises a resolutive action very salutary in many of the peri-uterine phlegmasias, and in certain ovari-salpingites, catarrhal; but it is not efficacious and even harmful in high dosage, especially if the intra-uterine pole is negative, in phlegmasia of the annexes.

The suffering caused by the current will increase with the inflammatory condition of the annexes, and ought to serve as a valuable means of diagnosis in determining the existence and the nature of the peri-uterine liquid collection, hematic or suppurative, which may be unknown or simply suspected, and a resort to, if suppurative, prompt surgical interference should be advised.

2. The effects of the constant galvanic current are polar, or inter-polar: the inter-polar, trophic and dynamic, which increases as the square of the intensity increases and augments the polar action. This utilizes at first each pole in a different way, which Apostoli has called the caloric action, developed afterward by the passage of the current, in order to increase the interstitial circulation, and at length the anti-septic action of the positive pole, of which Apostoli and Laguerrière have recently given experimental demonstration.

3. The high galvanic applications, used in a variable manner, above fifty milliamperes, according to the tolerance of the patient and the multiple clinical indications, form the fundamental basis of the Apostoli method, and find justification, firstly, in the utilization of circulatory drainage, the direct result of the caloric action, due to the resistance of the passage of the current and proportional to the square of the intensity.

Secondly, in the anti-septic, or microbic action which increases with the intensity of the current.

Thirdly, in the rapidity and efficacy of the effects produced, which are proportional to the square of the electric energy, after a formula, analogous to that of the measure of the energy of other natural forces.

Fourthly, in the generalization of the method to the rebellious

cases, (fibroma and sub-peritoneal endometritis, fungous growths, etc.,) and in young women.

Fifthly, in the removal of the deposits resulting from inflammation, which, other things being equal, will be lessened in danger in proportion to the intensity of the galvanic current.

The vaginal application of the galvanic current, which is the method selected by Monsieur Chéron for fibromas only, and since applied by A. Martin, Bracket, Menière, Carpenter, Mundé and others, gives results very inferior to the intra-uterine applications which should remain the method of choice, because it utilizes, above all, the maximums of the constant current, and of its energy. It also utilizes the antiseptic power of the positive pole, which is wholly local, and which is lost in the inter-polar circuit, or at the negative pole. It places often in contribution the derivative or caustic action of the intra-uterine application, treating thus at the same time either simple endometritis or endometritis complicated so often with fibroma and peri-uterine phlegmasia, assuring thus a more rapid, complete and permanent cure. It permits better than the vaginal application the minimizing of pain, and renders more tolerable the use of high dosage, and it assures, finally, a greater efficacy by rendering possible an increase of intensity applied, and of the bloody irrigation which it induces.

The vaginal galvano-punctures, made at some millimeters of depth (from 2-5) by the aid of a filiformed trocar, isolated in its whole extent, except at the point, forms the complement, often very salutary, of the intra-uterine therapeutics created by Apostoli, in localizing better the galvanic action, and in rendering more efficacious, in certain cases, the application of small or medium doses.

The harmlessness of the intra-uterine therapeutics is affirmed at first by the parallel harmlessness of the chemical, or bloody methods of the intra-uterine curetting, and especially by the statistical figures gathered in the entire world, and Apostoli's own résumé, which is as follows :

From July, 1882, to July, 1890, he made 11,495 galvanic applications, which are divided thus : 8,177 galvano-caustic intra-uterine positive ; 2,486 intra-uterine negative galvano-caustic ; 222 vaginal positive galvano-punctures ; 614 vaginal negative galvano-punctures. He treated 912 patients, comprising 531 fibromas, 133 simple endometritis, 248 endometritis, complicated with peri-uterine phlegmasia, and these are divided thus :

Clinical.—313 fibromas ; 70 simple endometritis ; 163 complicated endometritis.

Indoor Patients.—218 fibromas; 63 simple endometritis; 85 complicated endometritis.

Three patients died, chargeable to operative faults, viz.: two galvano-punctures, of which one was a sub-peritoneal fibroid, the other, an ovaro-salpingitis; and one, a caustic galvano-puncture, which was taken for a fibroid. He has observed thirty cases of pregnancy supervening after intra-uterine galvanic applications.

SOME OBSTETRIC POINTS.

By GEORGE H. ROHÉ, M. D.

Professor of Obstetrics, College of Physicians and Surgeons, Baltimore.

[*Baltimore Medical and Surgical Journal.*]

ANTISEPSIS means cleanliness. Septic fever after delivery means neglect of cleanliness.

THERE is no "milk fever." What has been called by that name is neither more nor less than fever from septic absorption.

DURING the past three years, 377 women were delivered in the Maryland Maternité. Not one of these died of any septic disease.

THE treatment of puerperal peritonitis by abdominal incision, flushing and drainage, is gaining ground. The opium treatment is being abandoned for saline purgation.

AT the Maternité, Credé's method of preventing ophthalmia neonatorum by applying a one per cent. solution of silver nitrate to the conjunctiva immediately after birth, is used with success.

THE old-fashioned "monthly nurse" must go. The clean, neat, intelligent and trained aseptic obstetric nurse is coming into fashion. Let us help her along in her good work.

CESAREAN section and craniotomy: They do not exclude each other but each has its rationally indicated field of usefulness. There are, properly speaking, no operations of election in obstetrics; the indicated operation is the one that must be done.

A DISINFECTANT solution for the hands should contain 1:1000 of mercuric chloride. This is to be used *after* the hands and arms have been scrubbed with hot water and soap, using a nail brush vigorously for several minutes.

A VAGINAL mercuric chloride douche may be of the strength of 1:4000; for intra-uterine use it should not be stronger than 1:5000, injected through Gardner's intra-uterine, soft-rubber catheter.



[From the "Buffalo Illustrated Express," November 23, 1890.]



DR. ROBERT KOCH.

BUFFALO MEDICAL AND SURGICAL JOURNAL

A MONTHLY REVIEW OF MEDICINE AND SURGERY.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed to the editors :
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No. 5

Editorial.

KOCH'S DISCOVERY.

THE announcement that Professor Koch, of Berlin, has been able to arrest and even destroy tubercular processes by means of the injection of some remedy, was received with joy by the whole world. Koch's great reputation and the complete belief in his ability in this line of study, have led many to accept as fully proven that which is, as yet, in the stage of experimentation. It was unfortunate that Koch made any statement concerning his studies in this direction until he could divulge complete information in connection with the subject. We are entitled to know the remedy, as well as the means of using it. This knowledge, of course, he expects to give us, but in the meantime it is wise to refrain from any opinion, even on theoretical grounds, as to the probability of the success of the method.

This has been called "The Iron Age of Positivism." We demand proof before we believe; and in questions of the cure of disease, time to observe the results of treatment is absolutely essential before we can obtain the proof we seek. Already the statement is made that it will take fully a year of trial before a reliable opinion can be formed as to the curability of consumption, either in advanced or early stages, by the proposed method. While, therefore, we must wait before definite knowledge is possible, it is confidently to be hoped that Koch's discovery will be proven to be all that the most ardent could wish it to be. Then he will stand among the greatest benefactors of his race.

It is to be noted that much of the confusion that exists up to the present in this matter is due to the lay press. In the desire for news it is announced one day that the remedy is a success, and the next that it is a failure. It would be much better if, in cases of this nature, where the greatest skill is necessary in order to understand and draw correct conclusions, the press would wait for thorough information before giving doubtful questions such wide publicity.

Two other things occur to us: First, that patients should not rush to Berlin under the hope that cure is at hand. It cannot be long before the general profession will know what the remedy is and be able to use it and test it the world over. Then proper advice can be given concerning it. And second, the profession ought not to use the remedy until they know what it is. It is a cardinal principle of medicine that unknown things should not be used. It ought not to be departed from in this case, even under the sanction of such a mighty name as Koch's.

We hope that before long we shall have reliable information upon which to suggest something more definite than is now possible. It may be that before this reaches the eyes of our readers, a further announcement will be made on the authority of the distinguished professor that will materially modify any opinion that could now be intelligently offered. So we wait with patiently additional belief from Koch's laboratory on this fascinating and transcendental and important subject.

As a matter of interest at this time, it will be observed that we have a photograph of Dr. Koch in this number of the *Journal*. It is an excellent likeness of the great laboratory investigator, taken from a recent photograph and in which we are indebted to the courtesy of the *British Illustrated Press*.

The Sanction Surgeon and Veterinary Association held a most interesting and profitable meeting at Quana, Ill., on Tuesday, Wednesday and Thursday, November 1, 2, and 3, 1891. The papers read and the discussions thereon were, for the most part, of a high order of merit, and the same in fact, and during the three days session will fill a volume that our medical body might be proud to read. The medical profession at Quana did all that could be done to make the sojourn of the visitors pleasant, and the social entertainments were of a delightful character. The Cavalry and Artillery regiments with a most hospitality, that could not

be excelled in any city of the land, and the reception it gave the association on Wednesday evening, November 12th, will be remembered a long time as a conspicuous gathering of beautiful women and renowned men, in which music, flowers, wine, and substantial viands blended in a most artistic and gratifying manner. The next meeting will be held in Richmond, Va., in November, 1891, when Dr. Hunter McGuire will serve as Chairman of the Committee of Arrangements. The officers chosen for the ensuing year are: President, Dr. Lewis S. McMurtry, of Louisville; Vice-Presidents, Dr. J. McF. Gastin, of Atlanta, and Dr. J. T. Wilson, of Sherman, Texas; Secretary, Dr. W. E. B. Davis, of Birmingham, Ala.; Treasurer, Dr. H. P. Cochrane, also of Birmingham. The Judicial Council remains the same as last year, except that Dr. George J. Engelmann, of St. Louis, was chosen to fill the vacancy occasioned by the expiration of the term of Dr. Bedford Brown, of Alexandria, Va. The accomplished Secretary, Dr. W. E. B. Davis, deserves great praise for the excellent manner in which he conducted the affairs of the Association, and his continuance in office is an indication of what the future will vouchsafe to this able and scientific body of professional workers.

THE New York Academy of Medicine dedicated its new building, No. 17 West Forty-third street, on Thursday evening, November 20, 1890. The occasion was a memorable one in the history of the academy, and was celebrated with addresses, music and refreshments, that more than a thousand guests enjoyed until a late hour of the night.

Many physicians from a distance were present by invitation to take part in, or enjoy the ceremonies, among whom were Dr. S. Weir Mitchell, of Philadelphia; Drs. James R. Chadwick and R. H. Fitz, of Boston; Drs. A. Vander Veer, Franklin Townsend and M. J. Lewi, of Albany; Dr. B. F. Sherman, of Ogdensburg, N. Y.; Dr. J. O. Roe, of Rochester; Dr. J. S. Billings, of Washington, and Drs. H. R. Hopkins and W. W. Potter, of Buffalo.

The addresses were of an appropriate character, and the spacious hall was filled to its greatest capacity with the wealth, beauty, and fashion of the Metropolis, who listened attentively for two hours to the speakers. Afterward the floors were cleared, refreshments were served, and the remainder of evening spent in pleasant social intercourse.

The academy is to be congratulated upon its entrance into the new era in its existence that was so successfully inaugurated on this auspicious November night.

THE following additional appointments to the visiting staff of the Buffalo General Hospital have recently been made: Assistant Gynecologist, Dr. M. A. Crockett; Assistant Surgeon, Dr. John Parmenter; Assistant Physician, Dr. DeLancey Rochester.

Personal.

DR. I. S. STONE, formerly of Lincoln, Virginia, and Surgeon in charge of the Springdale Sanitarium, has removed to 1309 H street northwest, Washington, D. C., where he will devote his entire time to that line of work in which he has been so successful — gynecology. Dr. Stone is one of the most energetic and progressive physicians in Virginia. He has always been an active Fellow of his State Society, and more recently served well the State Board Medical Examiners as a representative of the State at large. Success must follow him wherever he goes.— *Virginia Med. Monthly*.

DR. SENECA D. POWELL, of New York, gave a dinner at his residence, No. 12 W. Fortieth street, on Wednesday evening, November 12, 1890, in honor of Dr. William H. Johnston, of Birmingham, Ala. The occasion was a delightful one in all respects, and it afforded the distinguished guest an opportunity to meet and renew acquaintance with his many friends in New York, where in former years he resided, and who were delighted to revive the memories of younger days under such pleasant auspices.

Obituary.

DR. RICHARD J. LEVIS, of Philadelphia, died of pneumonia at his suburban residence, "Cedarcroft," November 12, 1890, aged 63 years. Dr. Levis had been a conspicuous member of the profession for so many years that it will be readily understood how deep is the mourning and how general the sorrow over the death of such a man. Without disparagement to others, it may be said of Dr.

Levis that he was personally the most popular member of the profession in Philadelphia. He has been widely distinguished as a surgeon, and has occupied various places of honor which the partiality of his colleagues and not his ambition, secured to him.

DR. ARTHUR B. CARPENTER, of Cleveland, O., died suddenly in that city recently. He was a rising young physician, and gave promise of a successful future. His remains, in accordance with his previously expressed wish, were incinerated at the Buffalo Crematory, October 17, 1890.

Society Meetings.

THE next meeting of the Buffalo Obstetrical Society will be held December 23d. Subject: Puerperal Mania, by Dr. A. H. Briggs.

Journalistic Notes.

THE *Review of Insanity and Nervous Disease*, published quarterly, has appeared with its first number. Each issue will be a complete compendium of the current literature of Neurology and Psychiatry from all languages. Articles are condensed, simplified, and, as far as possible, divested of technicality. Space will also be devoted to medico-legal literature. Every issue will represent gleanings from hundreds of journals. Special attention will be paid to literature relating to the treatment of nervous and mental diseases. Edited by J. H. McBride, M. D., Superintendent Milwaukee Sanitarium for Nervous and Mental Disease. Associate editors: Landon Carter Gray, M. D., New York City; C. K. Mills, M. D., Philadelphia; C. Eugene Riggs, M. D., St. Paul, Minn.; W. A. Jones, M. D., Minneapolis, Minn.; H. M. Bannister, M. D., Kankakee, Ill. Subscription, \$2.00 per year.

AMONG our many exchanges none is held in higher esteem than the *Annals of Surgery*, published by J. H. Chambers & Co., St. Louis. This journal, under the able editorship of Drs. Pilcher and Keetley, has won a reputation second to none in the surgical world, and in the street-language of the day, "it has come to stay." It contains each month original memoirs, editorial articles, book

reviews, and an index of surgical progress, comprising a synopsis of the important articles upon the various departments of surgery appearing in the recognized journals of the world. In the last ten months there have been thirty-four original articles, twenty-two editorials, upon leading topics, and 216 abstracts from the writings of the leaders in surgery. The various articles cover the entire range of surgery, and make the *Annals* a most excellent reference journal. We hope that the journal may find a large circulation, not only among surgeons but physicians as well, who will find in it much that is of use to them.

Book Reviews.

THE ESSENTIALS OF MEDICAL CHEMISTRY AND URINALYSIS. By SAM. E. WOODY. A. M., M. D., Professor of Chemistry and Public Hygiene, and Clinical Lecturer on Diseases of Children in the Kentucky School of Medicine. Third edition: revised, enlarged and illustrated: pp. 157. P. Blakiston, Son & Co., Philadelphia, 1890.

Upon reading the title page of this little work we hoped to find a brief outline of the chemistry of the human body in its relation to physiology and pathology. But alas for human hopes! A half-dozen pages had not been read before our hopes and anticipations vanished like mist before the noon-day sun.

If teachers of medical chemistry would only step out of the rut they have been traveling for years and teach the subject as it should be, physicians would appreciate this branch of the science far more than they do, and chemistry, instead of being considered of only passing importance, would soon be elevated to its proper sphere. We realize that many institutions have too brief a course, in which many subjects of direct importance must be handled, to give the student more than a passing outline of chemistry. Under such conditions we would advise that the course be lengthened, and the first step be taken to fall in line with those colleges that are endeavoring to advance medical education: that the student be first thoroughly grounded in the principles of chemistry, and that medical chemistry be then taught from the vantage ground of physiology and pathology. Until this is done, the average student will derive but little benefit from his study of chemistry at college. He sees, in the "atomic theory," the "laws of definite and multiple proportions," or even in the properties of the elements and their com-

pounds, no direct bearing upon or connection with medicine, and is liable to do only as much as is required to pass his examination, and six months after this is passed he knows so little that his teacher blushes when he realizes the fact.

Of this little work before us we can only say that it is not what it is claimed to be. It is nothing more than a brief outline of general chemistry, with a chapter on the urine and its examination.

An examination of the text shows a lack of clearness, which is so essential to the student.

We are glad that the author has discarded the old obsolete classification of the elements into metals and non-metals.

Under the chapter Water, the author says :

Though chemical analysis cannot detect the disease-producing elements, it can detect organic impurity, without which they cannot exist. This is easily done thus : (1) Half fill a clean bottle with the water, warm, agitate and critically smell it. A foul odor indicates organic impurity. (2) Fill a clean pint bottle three-fourths full, add a teaspoonful of the purest white sugar or gelatine ; set aside, in a warm place, for two days, when, if it becomes cloudy (bacteria), it is unfit for use.

While these methods are, as the doctor says, only "rough-and-ready tests," they are very liable to lead the physician or his patient into a false feeling of security. The only proper way to determine the organic purity of a potable water is by chemical analysis, and this should be done by one trained for such work, and who is competent to interpret correctly the results obtained.

The statement made that aqua-regia is the only solvent of gold and platinum, is erroneous.

In the portion of the work treating on organic chemistry under the head of Ethers, the author says (after describing the process of manufacture) : "The sulphuric acid is said to act by its mere presence, by *catalysis* ; or in other words, it acts because it acts."

. . . . We consider the manner in which this statement is put as entirely unwarranted in the light of modern investigation. Had the author said : "The action of the sulphuric acid was formerly explained by catalysis," and then gone on to say that Williamson had proven the true rationale to be as follows (giving it), no one would be liable to suppose that the professor was expounding some new unheard-of explanation. The author, in our opinion, does not give those who have gone before him sufficient credit for the work done.

While this little book is printed in the first-class style so characteristic of the publishers, there are a number of typographical errors which should not be in a third edition.

J. A. M.

FAMILIAR FORMS OF NERVOUS DISEASE. By M. ALLEN STARR, M. D., Ph. D., Professor of Diseases of the Mind and Nervous System, College of Physicians and Surgeons, New York. With illustrations, diagrams and charts. 8vo: pp. xii.—339. New York: William Wood & Company. 1890.

The work before us, as the author states, is not a treatise upon nervous disease — only a series of clinical studies of the more familiar forms. The data which have been utilized in the preparation of these studies has been selected chiefly from the nervous clinic of the College of Physicians and Surgeons, New York. The object of the work is a commendable one, inasmuch as it places before the medical world the experience of a body of men with a complex and compound series of diseases, the solution of which, clinically and therapeutically, is of great importance. The formulation of general rules in the treatment of such cases must come from large clinics, where cases may be massed and treatment carefully watched. The author, with his able corps of assistants, has chosen typical cases of nervous and mental diseases, and pointed out the indication of medical or surgical treatment, as the case may be, and, whenever possible, has given the results of such treatment.

The first eleven chapters the author devotes to personal study and observation of brain and cord lesions. In reviewing the work accomplished in this department, numerous cases are reported which illustrate the points in discussion — adding materially to its interest and instructiveness. The results of surgical procedure have been, whenever practicable, good.

Chapter XII. is devoted to a clinical study of locomotor ataxia, and the results of treatment. The suspension method, although unfavorably reported upon, still seems to have held its own against any one remedy used. It was employed three months, and then allowed to fall into disuse. Of ten cases treated, four cases have improved, three appear stationary; in the remainder the disease is progressing. One patient has died. We hardly believe that such is proof sufficient of its "inability to relieve the symptoms."

Thirty-one cases of infantile paralysis are reported, well classified, and the important points freely commented upon.

Twenty-three cases of paralysis agitans are reported, and a careful study of them has been made by Dr. Peterson, chief of clinic. In five cases tremor of the head was noted, tending with other observations to question Charcot's statement, that tremor of the

head is secondary to that of the body. The treatment of these cases has been either empirical or symptomatic, without any brilliant results.

The chapters on Multiple Neuritis and Paramyoclonus Multiplex by the author are very complete, and are followed by an extended bibliography.

Chapter XVI. is devoted to the study of Chorea, by Dr. Vought ; 124 cases were under treatment, of whom three suffered from previous attacks of malaria, twenty-one from rheumatism. Improvement or cure generally took place during the fourth week.

Chapter XVII. is devoted to epilepsy. Tincture of simulo has been employed as a remedial agent in fourteen cases ; the drug had the effect of lessening the number of attacks ; especially in the grand-mal, but had no effect whatever upon petit-mal.

Chapter XX. treats of the ordinary forms of insanity, under the charge of Dr. Peterson. Seventeen cases were admitted and treated.

In all, some 2,000 cases were under treatment from February, 1888, to January, 1889. Their methodical and careful analysis, although a matter of great labor and time, is of much interest and value, and, like the author, we indulge in the hope that similar works may be published by the large clinics in this country. William Wood & Company have added greatly to the treatise by their excellent typographical work. W. C. K.

THE MEDICAL STUDENTS' MANUAL OF CHEMISTRY. By R. A. WITTHAUS, A. M., M. D., Professor of Chemistry and Physics in the University of the City of New York ; Professor of Chemistry and Toxicology in the University of Vermont ; Member of the Chemical Societies of Paris and Berlin ; Member of the American Chemical Society ; Fellow of the American Academy of Medicine, of the New York Academy of Medicine, of the American Association for the Advancement of Science, etc. Third edition, pp. xii.—528. William Wood & Company, New York. 1890.

When we consider how much dross and chaff is placed upon the market under the title, Text-book of Chemistry, it is indeed a pleasure to occasionally meet a work of such value as the one before us. We extend to Professor Witthaus our heartiest congratulations for his success in the arrangements of this manual. It is clear, concise, brought down to date, and sufficiently extensive to give medical students a thorough groundwork in the grand science of chemistry.

Part I. Introduction occupies fifty-two pages, divided into three general groups: General Properties of Matter; Physical Characters of Chemical Interest; and Chemical Combination. In the last group, the elements, their combination; the atomic theory, atomic and molecular weights; atomicity; symbols; acids, bases, and salts; stoichiometry; nomenclature; radicals, composition and constitution; and classification of the elements are all carefully considered. The author adopts the following classifications:

Class I. Typical elements.

Class II. Elements whose oxides unite with water to form acids, never to form bases, which do not form oxy-salts.

Class III. Elements whose oxides unite with water, some to form bases, others to form acids, which form oxy-salts.

Class IV. Elements whose oxides unite with water to form bases, never to form acids, which form oxy-salts.

Within the classes a further subdivision is made into groups, each group containing those elements within the class which have equal valences, which form corresponding compounds, and whose *chemical characters* are otherwise similar.

It will readily be seen that Class I. will contain hydrogen and oxygen; Class II., those elements commonly called non-metallic elements, or those having an electro-negative character, with the exception of oxygen. Class IV. contains all those elements that are decidedly basic or electro-positive in character, excepting hydrogen; while Class III. contains a group of elements lying between the decidedly acid or negative, and the decidedly basic or positive elements. To this class belong those elements which act, now as an acid, now as a base. The classification is an excellent one, and does not present the difficulties in the lecture-room which are experienced in the use of a classification based upon the periodic law.

Part II. is devoted to Special Chemistry, *i. e.*, to a study of the properties of the elements and their compounds.

Of Organic Chemistry we have but little to say. It is clear and concise, and the student need have no fear of its being a bug-bear.

Part III. treats of Chemical Technics, in which the student is taught something of chemical manipulation.

The term "hydrate" is used for such compounds as NaOH . In this we must say that we differ with the author as to the advisability of using this term for compounds of this class. We believe the term "hydroxide" better adapted, and believe that "hydrate"

should be reserved to characterize such compounds as unite with water without the evolution of hydrogen; for example, sulphuric acid hydrate, having the composition $H_2SO_4 + H_2O$. But this is a small matter.

On the whole we consider Prof. Witthaus's Manual an excellent one, and cheerfully recommend it to the profession.

The publishers have gotten the volume up in beautiful shape; the paper is good, the print clear and very easily read, and the illustrations excellent.

J. A. M.

THE SCIENCE AND ART OF OBSTETRICS. By THEOPHILUS PARVIN, M. D., L. L. D., Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College, Philadelphia, and one of the Obstetricians to the Philadelphia Hospital. Second edition, revised and enlarged. Illustrated with 231 wood-cuts and a colored plate; pp. xvi. — 704. Philadelphia: Lea Brothers & Co. 1890. Price, cloth, \$4.25; leather, \$5.25. Buffalo: Peter Paul & Bro.

The second edition of this work, following so soon after its first publication, demonstrates its real value and the favor bestowed upon it by the profession. We regard it as the most valuable textbook for the student of medicine yet published. The author has been a most successful teacher for a long period, and the discipline and training of the lecture-room are observed in the clearness with which the often obscure principles of the science and art of obstetrics is presented to the comprehension of the under-graduate. We think this feature is one of the strongest in the work, and commend it especially to teachers.

When the first edition was issued, we favorably reviewed it, and commended it to the profession. The present edition is greatly improved, and embodies all the advances made in this important department of medicine up to the time of its publication. These changes have been accomplished without material increase in bulk, while they have been used with sufficient thoroughness to entitle the volume to be regarded as a new work.

The author, in the section on the curative treatment of eclampsia, says: "Bleeding was formerly regarded by most authorities as the essential treatment, but in recent years it is absolutely rejected by some of the best obstetric teachers." "Those who always bled in eclampsia were certainly wrong, but is it quite sure that those who never bled were invariably right?" We think if the results of treatment, in which morphia, chloral hydrat. and other drugs were used, were compared with others of the old régime, it would

be found that recoveries are not any more frequent, and we doubt if as frequent as formerly. The profession has departed too far from venesection, and must, in a measure at least, return to it.

The chapters on the mechanism of labor are full and clear, and the author's views are in accordance with the latest opinions on these important subjects.

The section on antiseptics is too brief to fully compass a subject of such vast importance. The attention directed to personal cleanliness and the use of germicides, marks an important era in obstetrical practice. The author favors the free use of antiseptics before, during, subsequent to labor, and, to a degree, in the specific instructions given in the pathology of the puerperal state, makes amends for the brief reference given to antiseptics in the chapters above referred to.

The entire work is from the pen of a thorough student and an accomplished obstetrician, and will receive from the profession the endorsement it so richly deserves.

SAUNDERS QUESTION COMPENDS. Nos. 8 and 9. *Essentials of Practice of Medicine*: arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By HENRY MORRIS. M. D., late Demonstrator Jefferson Medical College. Philadelphia: Visiting Physician to St. Joseph's Hospital, etc., etc. With a very complete Appendix on the Examination of Urine. By Lawrence Wolff. M. D., Demonstrator of Chemistry. Jefferson Medical College. Philadelphia: W. B. Saunders. 1890.

This little book is one of a kind that should never be published. The various Quiz Compendes, Question Compendes, and *Essentials* of the various departments of medical knowledge that have appeared in the last few years, have done more than any one thing to make medical education superficial. The students, instead of devoting themselves to the study of the principles of the practice of medicine, and the application of these principles to individual cases, try to learn by note, by means of question and answer, the diagnosis and therapy of each disease as a separate entity; and these kind of books aid them in acquiring just such superficial knowledge. We quote from the preface:

This little volume is intended as an *aid* to the advanced student of medicine who is preparing for his degree, or to the young practitioner in diagnosing affections, or selecting the remedy for them. The author hopes it will be distinctly understood by the student that this book is not intended to, nor can it, replace the larger text-books in general use.

As a matter of fact, whether the author intends it or not, such little books do take the places of the larger text-books, and a great many students "cram" for examinations and succeed in passing by the aid of just such books; students who, without such aid, would not succeed in passing at all, or, at any rate, would take more years of careful study to accomplish their object, and, in consequence, would be much better physicians and broader-minded men of greater culture, and, therefore, more useful citizens than is possible for them to become under the "cram-for-a-degree" kind of education that is fostered by Question Compendes and their congeners.

For this sort of book the one before us answers its purpose very well. The appendix on The Chemical and Microscopic Examination of the Urine for Clinical Purposes, which is excellent, makes it of more value than most of its kind.

The binding and letter-press are very good, but the illustrations are not very clear, the wood-cut type apparently being old, or not well done.

DE L. R.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Volume the Eighth. Edited by J. Ewing Mears, M. D., Recorder of the Association. 8vo; pp. xx.—290. Philadelphia: Printed for the Association, and for sale by P. Blakiston, Son & Co. 1890. Dornan, Printer.

The deliberations of the American Surgical Association, contained in this volume, are quite up to the standard of former years. The transactions contain the following articles: President's address upon Pioneer Surgery in Kentucky, by David W. Yandell; Surgical Treatment of Tumors of the Bladder, by P. S. Conner; Treatment of Fractures of the Shaft of the Femur, by Stephen Smith; A Rare Form of Epithelioma of the Hand, by Charles B. Nancrede and H. Gibbes; The Pathology and Treatment of Clubfoot, especially varus and equino-varus, with brief reports of Fifteen Excisions of the Astragalus for Correction of the Deformity, by Thomas G. Morton; The Radical Cure of Hernia, with results of 134 operations, by W. T. Bull; Lumbar Hernia, by C. H. Mastin; The Propriety of the Removal of the Appendix Vermiformis during the Intervals of Recurrent Attacks of Appendicitis, by F. S. Dennis; Rupture of the Middle Meningeal Artery without Fracture; Ligation of the Common Carotid Artery for Secondary Hemorrhage, by Joseph Ransohoff; Nephrorrhaphy, by William Keen; Hypertrophy of the Prostate, by J. A. Cominger; Lupus of Tongue, by D. W. Cheever; Retro-Pharyngeal Sarcoma Removed by an External

Incision through the Neck, by D. W. Cheever ; **An Emergency Case**, by J. E. Owens ; **A Report of Twenty-one Cases of Supra-Pubic Cystotomy**, by Hunter McGuire ; **A New Method of Applying Antisepsis in the Treatment of Recent Anterior Urethritis**, by J. William White ; **Arthrectomy of the Knee-Joint**, by E. H. Bradford ; **Para-Nephritic Cysts**, by Robert Abbe ; **Fractures and Disjunctures of the Pelvis : their Effect upon the Genito-Urinary Tract and Large Pelvic Blood-Vessels**, by O. H. Allis ; **Removal of a Tubercular Tumor of the Larynx by Laryngo-Pharyngotomy, with Demonstration of Cases**, by A. P. Gerster.

The selection of subjects is good, and the names of the writers are sufficient evidence that the contributions making up the transactions are masterly and scientific.

LECTURES ON MASSAGE AND ELECTRICITY IN THE TREATMENT OF DISEASE (Masso-Electro-therapeutics). By THOMAS STRETCH DOWSE, M. D., Fellow of the College of Physicians of Edinburgh ; formerly Physician Superintendent of the Central London Sick Asylum ; Associate Member of the Neurological Society of New York, etc. Royal octavo, cloth, pp. 373. New York : E. B. Treat & Co., 5 Cooper Union. London : Hamilton, Adams & Company. 1890. Price. \$2.75.

This book comprises a series of fifteen lectures.

Those on Massage are good, and will give the reader a very fair idea of the methods used in applying the treatment. This is made more easy by the aid of numerous illustrations. The lectures are strengthened by lengthy quotations from other authors, notably, Charcot, Weir Mitchell, and Graham. Like most writers on this subject, the author is enthusiastic, and leaves the impression on the reader that massage will accomplish more than we have found in our experience. He recommends it also as a treatment for housemaid's knee. This is recommending a slow and tedious process in place of the more rapid and more certain surgical treatment.

If advocates of massage would recommend it for use where it is the best treatment, we believe it would come far more rapidly into general use.

The lectures on electricity are too curtailed to do much more than give a general idea of electro-therapeutics.

The volume is well published, and is remarkably free from typographical errors.

J. W. P.

THE MEDICAL NEWS VISITING LIST for 1891. Weekly (dated for thirty patients) ; Monthly (undated, for 120 patients per month) ; Perpetual (undated, for thirty patients weekly per year) ; and Perpetual (undated, for sixty patients weekly per year). The first three styles contain 32 pages of data and 176 pages of blanks. The 60-Patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, pocket, pencil, rubber, erasible tablet, etc. Leather, \$1.25. Philadelphia : Lea Brothers & Co. 1890.

This popular visiting list, now making its annual tour, has been thoroughly revised and brought up to date in every respect. The text portion (thirty-two pages) contains the most useful data for the physician and surgeon, including an alphabetical Table of Diseases, with the most approved remedies, and a Table of Doses, both prepared from Dr. H. A. Hare's new *Text-Book of Practical Therapeutics*. It also contains sections on Examination of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, Diagnostic Table of Eruptive Fevers, Ligation of Arteries, and a full descriptive list of valuable remedies not yet in general use. The classified blanks (176 pages) are arranged to hold records of all kinds of professional work, with memoranda and accounts. Four styles are now published : Weekly (dated for thirty patients) ; Monthly (undated for 120 patients per month, and good for any year) ; Perpetual (undated, for thirty patients weekly per year) ; and Perpetual (undated, for sixty patients weekly per year). This last style, a novelty for the coming year, consists of 256 pages of assorted record blanks, without text. *The Medical News Visiting List* adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, with pocket, pencil, rubber, erasible tablet and catheter-scale ; price, \$1.25. When desired, a ready reference thumb-letter index is furnished, which is peculiar to this visiting list, and will save many-fold its small cost (25 cents) in the economy of time effected during a year. In short, every need of the physician seems to have been anticipated in *The Medical News Visiting List*.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Volume II., second session, held at Nashville, Tenn., November 12th, 13th and 14th, 1889, 8vo, pp. xxxvi.—379. Published by the Association at Philadelphia. William J. Dornan, Printer. 1890.

This volume contains the papers read, and the discussions thereon, before this association at its second annual session. It embraces the list of officers and members, the constitution and by-laws of the association, and the minutes of the second annual meeting, together

with twenty-seven titles of papers on subjects pertaining to surgery and gynecology. It also contains numerous illustrations that elucidate the text in a capable manner.

It would be difficult to find a more attractive volume of transactions in the work of any society with which we are acquainted. It is most admirably edited by the secretary of the society, Dr. W. E. B. Davis, of Birmingham, Ala., and can be obtained either of him or of the printer, William J. Dornan, 100 North Seventh street, Philadelphia, Pa.

An association of American physicians and surgeons that creates a volume of such excellence during a three days' session, need not fear to offer its work annually for a period that shall embrace the ages.

A COMPEND OF SURGERY. For students and physicians. By ORVILLE HORWITZ, B. S., M. D., Demonstrator of Anatomy in Jefferson Medical College; Chief of the Out-door Surgical Department of Jefferson Medical College Hospital, and late Resident Surgeon of the Pennsylvania Hospital, Philadelphia. Quiz Compend No. 9. Third edition; thoroughly revised, enlarged and improved, with 91 illustrations. Philadelphia: P. Blakiston, Son & Co. 1887. Buffalo: Peter Paul & Bro.

There is a large amount of surgical knowledge compressed into a small space in this little book, and doubtless this edition will find the same favor with students as did the former editions. All such books as this have undesirable influences in many ways, but seem to be essential from the student's standpoint, and no doubt they impart knowledge to some who would be too careless to read carefully and condense the matter of larger works. The illustrations are numerous, type clear, and the size convenient. J. P.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY AND ALLIED DISORDERS of the Male Sexual Organs. By SAMUEL W. GROSS, A. M., M. D., LL. D., Professor of the Principles of Surgery and Clinical Surgery in the Jefferson Medical College of Philadelphia, etc. Fourth edition, revised by F. R. Sturgis, M. D., 8vo: pp. vii.—173. Philadelphia: Lea Brothers & Co. 1890.

This book quite maintains the reputation of the former editions of the same work. Impotence, sterility, spermatorrhea and prostaticorrhea are the subjects treated. To the main text Dr. Sturgis has made valuable additions, the result of a long and varied experience in this line of surgery. The book should be read by physicians and surgeons generally.

The publishers have made the volume a most attractive one.

J. P.

THE BIOGRAPHY OF EPHRAIM McDOWELL, M. D., "The Father of Ovariectomy." By his granddaughter, MARY YOUNG RIDENBAUGH. Together with valuable scientific treatises and articles relating to Ovariectomy; also eulogistic letters from eminent members of the medical profession in Europe and America. Small octavo, full Russia, gilt; pp. xvi.—538. New York: Charles L. Webster & Company. 1890. William J. Dornan, Philadelphia, Printer.

The memory of Ephraim McDowell is very dear to every American physician, and ought to be treasured by every woman in the land.

When we reflect that all the splendid record that abdominal surgery has ever made, has been built around that heroic feat performed by the stalwart Kentuckian in his humble home in Danville, it cannot be asserted that we are extravagant in our desire to have McDowell's name revered by all American physicians.

The work before us is a tribute of affection from a near kinswoman of the great McDowell, and will be read with interest by all who are fortunate enough to possess it or obtain access to its pages.

It is a beautifully printed volume, on excellent paper, and is bound in exquisite taste. It will at once furnish ready reference not only to McDowell's own work, but to that of many who have succeeded him in enlarging the field that he first cultivated, and ought to be found in the library of every physician.

It can be obtained in three different styles of binding upon application to the author, Mrs. Mary Young Ridenbaugh, P. O. Drawer 372, Philadelphia, Pa.

BOOKS AND PAMPHLETS RECEIVED.

A Manual of the Practice of Medicine. By Frederick Taylor, M. D., F. R. C. P., Physician to, and Lecturer at Guy's Hospital; Physician to the Evelina Hospital for Sick Children; Examiner in Materia Medica and Pharmaceutical Chemistry at the University of London. With Illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1890.

A Manual of Auscultation and Percussion. Embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M. D., LL. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc., etc. Fifth edition, thoroughly revised. By J. C. Wilson, M. D., Lecturer of Physical Diagnosis in the Jefferson Medical College, etc., etc. Illustrated with wood-cuts. Philadelphia: Lea Brothers & Company. 1890.

Diseases of the Eye. By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon to St. Thomas's Hospital; Surgeon to the Royal London (Moorfield's) Ophthalmic Hospital; Late Ophthalmic Surgeon to the Hospital for Sick Children, Great Ormond street. Fourth American, from the fifth English, edition. With a chapter on Examination for Color-Perception, by William Thomson, M. D., Professor of Ophthalmology in the Jefferson Medical College of Philadelphia. Lea Brothers & Company, Philadelphia. 1890.

Bacteriological Technology for Physicians, with seventy-two figures in the text. By Dr. C. J. Salomonson. Authorized translation from the second revised Danish edition. By William Trelease. New York: William Wood & Company. 1890.

A Compend of Human Anatomy, including the Anatomy of the Viscera. By Samuel O. L. Potter, M. A., M. D., Professor of Theory and Practice of Medicine in the Cooper Medical College of San Francisco; author of *A Hand-book of Materia Medica, Pharmacy and Therapeutics*, etc., etc., etc.; late A. A. Surgeon U. S. Army. Fifth edition, revised and enlarged, with 117 wood engravings; also an appendix, containing numerous tables and sixteen lithographic plates of the nerves and arteries. The Quiz Compend Series. Philadelphia: P. Blakiston, Son & Company, No. 1012 Walnut street. 1890.

Text-book of Materia Medica for Nurses. Compiled by Lavinia L. Dock, graduate of Bellevue Training School for Nurses; Superintendent of Grace Memorial House. G. P. Putnam's Sons. The Knickerbocker Press. 1890.

Essentials of the Practice of Pharmacy. Arranged in the form of questions and answers, prepared especially for pharmaceutical students. By Lucius E. Sayre, Ph. G., Professor of Pharmacy and Materia Medica of the School of Pharmacy of the University of Kansas. Philadelphia: W. B. Saunders. 913 Walnut street. 1890.

Progressive Exercises in Practical Chemistry. By Henry Leffmann, M. D., Ph. D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, in the Pennsylvania College of Dental Surgery, and in the Wagner Free Institute of Science; Pathological Chemist to the Jefferson Medical College Hospital, and William Beam, M. A., Demonstrator of Chemistry in the Pennsylvania College of Dental Surgery; Associate of the Society of Public Analysts of Great Britain. Illustrated. Philadelphia: P. Blakiston, Son & Company. 1890.

Essentials of Minor Surgery and Bandaging, with an appendix on Venereal Disease. Arranged in the form of questions and answers. Prepared especially for students of medicine. By Edward Martin, A. M., M. D., Instructor in Operative Surgery, University of Pennsylvania; Surgeon of the Howard Hospital; Assistant Surgeon to the

University, etc. Illustrated. Saunders Question Compenda, No. 12. Philadelphia: W. B. Saunders, 913 Walnut street. 1890.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Volume XI. Phædronus-Regent. Washington: Government Printing Office. 1890,

The Latin Grammar of Pharmacy and Medicine. By D. H. Robinson, Ph. D., Professor of Latin Language and Literature, University of Kansas. Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut street. 1890.

Post-Mortems. What to Look for and How to Make Them. By A. H. Newth, M. D., London. Edited, with numerous notes and additions. By F. W. Owen, M. D., Demonstrator of Anatomy in the Detroit College of Medicine. Published by The Illustrated Medical Journal Co., Detroit, Mich.

Cause and Treatment of Sterility in Both Sexes and Fecundation by Artificial Methods. Translated from the French of Dr. J. G  rard, Paris. With notes by Charles Everett Warren, M. D., Boston, Mass. With 200 illustrations designed by Jose Roy. Printed for private use only by the profession; pp. xi.—73.

Saunders' Pocket Medical Lexicon. Being a dictionary of words and terms used in medicine and surgery. Collected from the highest authorities and brought up to present date. By John M. Keating, M. D. (University of Pennsylvania), and Henry Hamilton, author of *A New Translation of Virgil's   neid into English rhyme*, etc. Philadelphia: W. B. Saunders, 913 Walnut street. 1890.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, at its semi-annual session, held at Hagerstown, Md., November, 1889. Ninety-second annual session held at Baltimore, Md., April, 1890.

One Hundred Consecutive Cases of Labor at the Maryland Maternite. With a description of the methods practised in that institution. By George H. Roh  , M. D., Director, and William J. Todd, M. D., Resident Physician. Reprint from Transactions of Medical and Chirurgical Faculty of the State of Maryland. 1890.

A Medico-Legal Case. The People vs. William Manly. By Dr. J. B. Andrews. Buffalo, N. Y. From *American Journal of Insanity*, October, 1890. Utica, N. Y.

The Rotary Element in Lateral Curvature of the Spine. By A. B. Judson, M. D., New York. Reprint from the *Medical Record*, November 1, 1890.

The Effects of Dry Atmosphere on Chronic Inflammation of the Larynx and Nares. By E. Fletcher Ingals, A. M., M. D., Professor of

Laryngology, Rush Medical College, etc., etc. Reprint from *The Journal of the American Medical Association*, October 11, 1890.

Report on the Examination of One Hundred Brains of Feeble-Minded Children. By A. W. Wilmarth, M. D., Elwyn, Pa., Assistant Superintendent of the Pennsylvania Institution for Feeble-Minded Children. Reprint from *The Alienist and Neurologist*, October, 1890.

President's Address : Consideration and Determination of Some of the Conditions Requiring Prompt Opening of the Peritoneal Cavity. By E. E. Montgomery, B. S., M. D., Philadelphia, Pa. Reprint from *Transactions of the American Association of Obstetricians and Gynecologists*. 1890.

Malaria and the Causation of Intermittent Fever. By Henry B. Baker, M. D., of Lansing, Mich. Reprint from *The Journal of the American Medical Association*, October 18, 1890.

Cornell University College of Agriculture. Bulletin of the Agricultural Experiment Station, Agricultural Division, XXI., October, Tomatoes ; and XXII. November, on the Effect of a Grain Ration for Cows at Pasture. 1890.

Reciprocity Treaties with Latin-America. Message of the President of the United States and Letter of the Secretary of State submitting the recommendations of the International American Conference. Washington : Government Printing Office. 1890.

International American Conference. Report and Recommendations on Postal and Cable Communication with Central and South America. Washington : Government Printing Office. 1890.

International American Conference. Report and Recommendations Concerning a Plan of Arbitration for the Settlement of Disputes between the American Republics. Washington : Government Printing Office. 1890.

International American Conference. Report and Recommendations Concerning Sanitary and Quarantine Regulations in Commerce with the American Republics. Washington : Government Printing Office. 1890.

Stoddart Bros.' Price List of Surgical Instruments and Physicians' Supplies. Buffalo, N. Y. 1890.

A New Test for Determining the Absence or Presence of Equilibrium of the External Ocular Muscles. By Alvin A. Hubbell, M. D., Buffalo, N. Y. Reprint from the *Buffalo Medical and Surgical Journal*, August, 1890.

HEALTH BULLETINS.

Abstracts of Proceedings of the Michigan State Board of Health. Meeting October 4, 1890.

Newport, R. I. Reports of Deaths and Contagious Diseases for the month of October, 1890.

Abstracts of Sanitary Reports, U. S. Marine Hospital Bureau, Washington, D. C. Volume V., Nos. 44, 45, 46, and 47.

Health in Michigan, October, 1890.

COLLEGE ANNOUNCEMENTS.

Medical College Announcements for 1890-1891 :

Woman's Medical College of Cincinnati.

London Post Graduate School.

Kentucky School of Medicine.

Miscellany.

THE Christmas edition of the *Cosmopolitan Magazine* is 100,000 copies. The order, as originally given to the printers, was for 85,000 copies, but while on the press it was thought advisable to increase the number to 100,000.

It contains a feature never before attempted by any magazine, consisting of 123 cartoons from the brush of Dan Beard, the now famous artist, who did such wonderful illustrations in Mark Twain's book, "The Yankee at the Court of King Arthur."

These cartoons are placed at the bottom of each page of the magazine, and take for their subject, "Christmas during the Eighteen Centuries of the Christian Era," with variations, showing the way in which we modern Christians carry out some of the chief texts of the Christian Gospel.

Above, and at each side of the page, is a quaint border, the whole effect being novel and extremely pleasing, and with the unusually varied table of contents, will make such a Christmas number as is worthy to go into more than 100,000 households.

The frontispieces of the *Cosmopolitan* have of late become noted for their beauty, some of them having as much as four printings. That for Christmas, while in but two printings, is not behind anything that has preceded it in artistic merit.

An excellently illustrated article is one on Teapots, by Eliza Ruhamah Scidmore. Literary Boston is treated with numerous portraits, and an article which comes with the ninetieth birthday of Von Moltke, sketches the life of the great Field-Marshal in an interesting way, and is by Gen. James Grant Wilson. Elizabeth Bisland has one of her charming articles.

The Christmas issue contains 228 illustrations, nearly double the number that have ever appeared in any illustrated magazine.

CONTENTS FOR DECEMBER.

Away on the Mountain, Wild and Bare (Frontispiece); The Passion Play at Oberammergau. Illustrated. Elizabeth Bisland; The Race. (Poem.) George Edgar Montgomery; The Cruise of the "Sonoma." Illustrated. T. H. Stevens; Collections of Teapots. (Illustrated.) Eliza Ruhamah Scidmore; The Army of

Japan. (Part II.) Illustrated. Arthur Sherburne Hardy ; Hymn. (Poem.) John W. Weidemeyer ; Field Marshal von Moltke. Illustrated. James Grant Wilson ; Mrs. Pendleton's Four-In-Hand. Illustrated. Gertrude Franklin Atherton ; Literary Boston. Illustrated. Lillian Whiting ; Equanimity. (Poem.) William Wheeler ; A Famous Fireplace. Illustrated. Herbert Pierson ; The Birds of Nazareth. (Poem.) Illustrated. Elizabeth Akers ; The Pursuit of the Martyns. (Part II.) Illustrated. Richard Malcolm Johnson ; Hylas. (Poem.) Marion M. Miller ; Review of Current Events, Murat Halstead ; Social Problems, Edward Everett Hale.

THE ALVARENGA PRIZE.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about \$180, will be made on July 14, 1891. Essays intended for competition may be upon any subject in medicine, and must be received by the Secretary of the College on or before May 1, 1891.

KING'S JOURNAL DIRECTORY for 1891, containing a complete list of Medical, Dental, Pharmaceutical, Chemical, Microscopical, Sanitary, Veterinary and Medico-Legal Journals, both Home and Foreign, will be ready for delivery on or before January 1st next. Orders should be sent promptly, as the book is sold by subscription only. Price, fifty cents, post-paid. Address Dr. F. King, Publisher, P. O. Box 587, New York. The *Directory* will be sent to libraries and managers of advertising departments, *free*.

THE *Baltimore Medical and Surgical Record* is the name of a new monthly journal of medicine and surgery, that has presented itself for the favor of the profession. The first number was issued in October, 1890, and contains forty-two double column large octavo pages. It is edited and managed by T. H. Graham, 1602 West Lauvale street, Baltimore, Md., and appears to have come to remain.

NOTICE TO CONTRIBUTORS.

We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the JOURNAL should be handed in before the first day of the month.

The Editors are not responsible for the views or opinions of contributors.

All communications should be addressed to

284 FRANKLIN STREET. BUFFALO, N. Y.

PEROXIDE OF HYDROGEN AND OZONE,

THEIR ANTISEPTIC PROPERTIES.

Read before the International Medical Congress, held at Berlin, Germany, on the 7th of August, 1890. Published by *Medical News of Philadelphia*, October 25, 1890. Pp. 416-418.

By Dr. PAUL GIBIER, *Director of the Pasteur Institute of New York.*

GENTLEMEN :

Since the discovery of Peroxide of Hydrogen by Thenard, in 1818, the therapeutical applications of this oxygenated compound seem to have been neglected both by the medical and the surgical professions ; and it is only in the last twenty years that a few bacteriologists have demonstrated the germicidal potency of this chemical.

In my opinion the reason for its not being in universal use is the difficulty of procuring it free from hurtful impurities. Another objection is the unstableness of the compound, which gives off nascent oxygen when brought in contact with organic substances.¹

Besides the foregoing objections, the surgical instruments decompose the peroxide, hence, if an operation is to be performed, the surgeon uses some other antiseptic during the procedure, and is apt to continue the application of the same antiseptic in the subsequent dressings.

Nevertheless, the satisfactory results which I have obtained at the Pasteur Institute of New York with Peroxide of Hydrogen, in the treatment of wounds resulting from deep bites, and those which I have observed at the French clinic of New York, in the treatment of phagedenic chancres, varicose ulcers, parasitic diseases of the skin, and also in the treatment of other affections caused by germs, justify me in adding my statement as to the value of the drug.

But, it is not from a clinical standpoint that I now direct attention to the antiseptic value of Peroxide of Hydrogen. What I now wish is merely to give a full report of the experiments which I have made on the effects of Peroxide of Hydrogen upon cultures of the following species of pathogenic microbes : *Bacillus anthracis*, *bacillus pyocyaneus*, the bacilli of typhoid fever, of Asiatic cholera, and of yellow fever, *streptococcus pyogenes*, *micro-bacillus prodigiosus*, *bacillus megaterium*, and the *bacillus of osteomyelitis*.

The Peroxide of Hydrogen which I used was a 3.2 per cent. solution, yielding fifteen times its volume of oxygen ; but this strength was reduced to about 1.5 per cent., corresponding to about eight volumes of oxygen by adding the fresh culture containing the microbe upon which I was experimenting. I have also experimented upon old cultures loaded with a large number of the spores of the *bacillus anthracis*. In

¹ The Peroxide of Hydrogen that I use is manufactured by Mr. Charles Marchand, of New York. The preparation is remarkable for its uniformity in strength, purity, and stability.

all cases my experiments were made with a few cubic centimetres of culture in sterilized test-tubes, in order to obtain accurate results.

The destructive action of Peroxide of Hydrogen, even diluted in the above proportions, is almost instantaneous. After a contact of a few minutes, I have tried to cultivate the microbes which were submitted to the peroxide, but unsuccessfully, owing to the fact that the germs had been completely destroyed.

I am now experimenting in the same manner upon the bacillus tuberculosis, and if I am not deceived in my expectation, I will be able to impart to the profession some interesting results.

It is worthy of notice that water charged, under pressure, with fifteen times its volume of pure oxygen has not the antiseptic properties of Peroxide of Hydrogen. This is due to the fact that when the peroxide is decomposed nascent oxygen separates in that most active and potent of its conditions next to the condition, or allotropic form, known as "Ozone." Therefore it is not illogical to conclude that ozone is the active element of Peroxide of Hydrogen.

Although Peroxide of Hydrogen decomposes rapidly in the presence of organic substances, I have observed that its decomposition is checked, to some extent, by the addition of a sufficient quantity of glycerin: such a mixture, however, cannot be kept for a long time, owing to the slow but constant formation of secondary products, having irritating properties.

Before concluding I wish to call attention to a new oxygenated compound, or rather ozonized compound, which has been recently discovered and called "Glycozone," by Mr. Marchand.

This Glycozone results from the reaction which takes place when glycerin is exposed to the action of ozone under pressure— one volume of glycerin with fifteen volumes of ozone produces Glycozone.

By submitting the bacillus anthracis, pyocyaneus, prodigiosus, and megaterium to the action of Glycozone, they are almost immediately destroyed.

I have observed that the action of Glycozone upon the typhoid fever bacillus, and some other germs, is much slower than the influence of Peroxide of Hydrogen.

In the dressing of wounds, ulcers, etc., the antiseptic influence of Glycozone is rather slow if compared with that of Peroxide of Hydrogen, with which it may, however, be mixed at the time of using.

Two months ago, a rabbit was inoculated with the hydrophobic virus, which had been submitted to the action of this new compound, and the animal is still alive.

I believe that the practitioner will meet with very satisfactory results with the use of Peroxide of Hydrogen, for the following reasons:

1. This chemical seems to have no injurious effect upon animal cells.
2. It has a very energetic destructive action upon vegetable cells—microbes.
3. It has no toxic properties: five cubic centimetres injected beneath the skin of a guinea-pig do not produce any serious result, and it is also harmless when given by the mouth.

As an immediate conclusion resulting from my experiments, my opinion is, that Peroxide of Hydrogen should be used in the treatment of diseases caused by germs, if the microbial element is directly accessible: and it is particularly useful in the treatment of infectious diseases of the throat and mouth.

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THREE CASES OF TUBERCULAR PERITONITIS OPERATED ON BY ABDOMINAL SECTION DURING THE YEAR.¹

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I THOUGHT that perhaps the histories of the three following cases might be of general interest to the members of this prosperous society, a society composed largely of members who fill the honorable calling of general practitioners. We all meet face to face a deadly foe—tubercle—a terrible foe, no matter in which organ or in what limb he assails us, a foe that nearly always is the victor, and we the vanquished. It may be that during our lifetime, in the light of recent researches, the tables may be turned, and this dreaded enemy may become as inert as the meanest of the parasites in the presence of an efficient parasiticide.

CASE I.² Mrs. K., *aet.* thirty-six, referred to me by my father, Dr. James Ross, Sr., III. para, youngest seven years; no miscarriages; was last unwell nine months ago. Was quite regular previous to that time. Abdomen began to enlarge about two months ago. She is now subject to cough and shortness of breath. Has pain in abdomen resembling the sticking of knives; this shoots up and down the abdomen, but is more severe on the right side. She has never been jaundiced. The enlargement has been rapid, and seemed to her greater on the right than on the left side. She has the *facies* peculiar to patients with ovarian dropsy.

On examination I found the abdomen much enlarged. Greatest girth thirty-seven inches. From umbilicus to crest of right ilium, 8½

1. Read before Toronto Medical Society.

2. Where the present tense is used, the extracts from my notes of the cases taken at the time are left unaltered.

inches. From umbilicus to crest of left ilium, $8\frac{1}{2}$ inches. On palpitation a hard mass was to be felt about $1\frac{1}{2}$ inches above the level of the umbilicus, but to the right of the median line. On percussion, bowel resonance was obtained down the linea alba, and in the flank, but it was a muffled resonance. On sitting up, there was evidence of the presence of ascitic fluid, though this was not definitely obtained when turned on either side. Fluctuation could be made out, but with a feeling of thickened walls intervening between the fingers. The test made by voluntary elevation of the head, and consequent contraction of the recti-muscles over the surface of the tumor, was satisfactory: a bulging took place in each flank with the ready displacement of the fluid free in the abdomen. Uterus was found to be empty.

Diagnosis.—I felt sure that there was a thickening of the peritoneum, and free fluid within the abdomen. Whether malignant or tubercular, I did not venture to say.

Treatment.—Advised exploratory incision. I saw the patient again, but failed to detect solidification of any part of either lung. The sputum was not examined. Operation performed March 28, 1890. Several of the active staff of the Woman's Hospital were present. I found the abdomen filled with serous fluid: no flocculi. The peritoneum was about $\frac{1}{4}$ of an inch thick, and studded with tubercular nodules. Above the hard mass to be felt externally, and mentioned above, was found to be produced by a thickened omentum, glued by thickened tissue to the abdominal wall, forming a conglomerate mass. The bowels were glued together in the upper abdomen and back in each loin. No tubercles were seen studding the parts of the bowels visible, but they were much reddened and inflamed. Tubercles might have been seen upon a more minute inspection, but they were not so readily visible as they were in a case to be related further on. Ovaries and uterus were quite normal and free from adhesions. The abdomen was washed out with a forcible stream of hot water, and drained through a glass drainage-tube placed in the pouch of Douglas. Before operation the temperature had been ranging between 99° and 100° . Pulse from 80° to 90° . On the day of operation, March 28th, at 5 p. m., temperature, 101.6° , pulse, 90° ; at 9.30 p. m., temperature, 98.6° , pulse, 90° . On the 29th, temperature reached 99.2° ; on the 30th, 99° ; on the 31st, 100.8° ; on the 2d April, 102.4° ; on the 4th and 5th, 102.4 . The temperature remained elevated until she left the hospital. The drainage-tube was taken out and a rubber one inserted. The wound healed readily. Stitches were taken out on the seventh day. The drainage-tube was shortened day by day, and nothing but a very small opening remained when the patient left the hospital some weeks after. During the latter part of her stay, symptoms of deposit of tubercle in the apex of the right lung could be readily made out. Cough became more troublesome, and sputum was like that of a phthisical patient. Tubular breathing, increased vocal

fremitus and tactile fremitus, could be obtained. An offensive diarrhea began to trouble her on the third day after the operation, and continued at irregular intervals until she went home. The hardness of the lump present in the abdomen before operation seemed to melt away in a marvelous manner. The abdomen did not refill while under my care.

After leaving the hospital she slept with a window open near her bed and contracted pleuro-pneumonia. I saw her once and advised that she be sent to her to the general hospital under one of the physicians, with the promise that I would call in to see her occasionally while attending to my patients in the gynecological department. We could not readmit her to the Woman's Hospital on account of the annoyance arising from her troublesome cough.

She did not follow the advice given, and I have not seen her since. On inquiry I find she died from tubercular disease of the lungs two months ago, ten months after the onset of disease. Whether there was any return of the abdominal symptoms I could not ascertain. The lung affection was, however, the most prominent.

CASE II. M. B., *act.* sixteen, single. Unwell only three times in her life. Now suffers from amenorrhea. I saw her first on the 16th June, 1890. She was then thin and emaciated, and looked very ill; temperature, 101°, pulse, 110. She said that about February, 1890, she noticed that her abdomen was enlarging. She was put upon a course of treatment and the swelling seemed to reduce. A month ago she again increased in size. She complains of pain in her sides, *i. e.*, in her loins. No edema is present. The uterine fundus cannot be felt. No ovaries to be found by bimanual examination. The sound could be passed but a very short distance. The abdomen was found very much enlarged. On palpation no definite tumor could be made out, but I found again between the fluctuating waves a peculiar muffled sensation experienced in the former case, and with my recent experience I felt sure that here again was a thickened peritoneum. Irregular tympanitic notes were elicited over the abdomen.

Her family history showed that her mother died of pyloric stenosis, supposed to have been malignant. Father still living and well. Father's sister died of tuberculosis. No other information could be obtained. Bowels move two or three times daily. Tongue is much coated at its posterior part.

Diagnosis. — In this case I made a positive diagnosis to the class, and said that the case was one of tubercular peritonitis. There were all the symptoms of free fluid in a thickened peritoneum, and the more definite symptoms of ovarian tumor, or other tumor, were absent.

Advised operation.

Operation performed June 18, 1890. On cutting down found peritoneum much thickened and studded with tubercular nodules, looking here and there like little tents. The intestines were matted together, pressed

backward into each loin, and upward by the fluid, and looked angry and inflamed. No broad ligament was present. There were no folds of pelvic peritoneum. The pelvic cavity ended in a round cul-de-sac, at the bottom of which sat an ill-developed cervix uteri. No fundus uteri could be definitely made out, and no ovaries or tubes could be felt.

Dr. A. H. Wright, who assisted me with the operation, passed his finger into the pelvis, and could not make out any positive fundus uteri, nor ovaries nor tubes. If the uterus was complete, it was very tiny. About three quarts of fluid were drained away, and the cavity was well flushed with hot water. A glass drainage-tube was used, and a rubber one was substituted for it later on. The rubber one was gradually shortened, and finally left out altogether. The wound healed by first intention. The temperature fell on the day after the operation from 102½° to 98°, and never rose above 100° afterwards. The patient went home on the 31st day of July, 1890, in perfect health. I have written for her history since her return. By the kindness of Dr. McKibbin, her physician, the following particulars have been obtained, dated November 27, 1890 : "I saw your patient to-day. A small opening remains in the tract of the drainage tube, surrounded by granulations, and continues to discharge, slightly, a thin yellowish fluid. She has enjoyed comparatively good health since her return. Appetite is extremely good. Suffers no pain. All the functions are normally performed, with the exception of the bowels. She suffers from constipation. The lungs are entirely free from disease. I can notice a slight enlargement in the left lumbar region, (I noticed this myself before she left the hospital.) and the whole abdomen presents a prominence that did not exist on September 15th, but the hard, rigid feeling of the abdomen then noticed has, to a great extent, disappeared. If there is any dropsical effusion, it is small in amount, and cannot be discerned. She has improved in flesh since the operation, but her condition is not to be compared with what it was prior to the commencement of her trouble last January."

CASE III. H. P., *act.* thirty-two. Married ten years. III. para : youngest two years : no miscarriages : menses began at fourteen years : always quite normal until last Winter when the discharge became more profuse and sometimes lasted for two weeks. No excessive pains. Was always able to go about. In appearance she is somewhat pale, with a coppery tinge : looks like a person suffering from a *cachexia*, anemic. Her chief pain is referred to the neck of the bladder. Micturition very frequent. No chest symptoms.

Urine.—Acid, pale amber, contains mucus, pus, a few red blood corpuscles, squamous epithelium and crystals of *oxalate* of lime. Tests for albumin and sugar not recorded by my clerk. She says that three or four weeks ago she had a fever with chills and sweats. These chills and subsequent perspirations came on every evening for three or four days. She had severe pains in the pelvic region. She was sup-

posed to be suffering from kidney disease. Appetite good, no vomiting. Bowels regular and move once or twice a day.

Has been in poor health for two years, ever since the birth of her last child. She has not been confined to bed until recently. On examination, under an anesthetic, I made out very distinctly a mass on each side of the uterus, and had no hesitation in pronouncing the case to be one of double pyosalpinx.

Operation advised and performed on the 16th of August, 1890, in the presence of several of my colleagues and students. The abdomen was not enlarged, and felt quite normal. On opening it the omentum was found to be adherent. The visceral and parietal peritoneum was studded with tubercle and somewhat thickened. The intestines were matted together. No fluid was present in the abdominal cavity. The inflammatory action had evidently been of the dry, adhesive variety. With some little difficulty I separated the adhesions and found both Fallopian tubes distended by fluid, and with their walls very much thickened. They were not removed, owing to the general condition found. I drew out a coil of intestine to show the students its condition. It was so studded with the tubercular deposit, that one could scarcely find a clear space as large as a ten cent piece. The mesentery was also very little affected. There was very little fat present. The bowels had the same appearance as that found in the preceding cases, namely, a red, inflamed appearance. It was impossible to wash out this case, owing to the adhesions of the bowels. A drainage-tube was left in for three days. The temperature never rose after the operation above 99.4°.

The patient went home. An unfavorable prognosis was given to the husband. In answer to a letter of inquiry I received the following from him a few days ago : December 1, 1890. "My wife is not well. For about three weeks after her return she was about the same as when she left Toronto. She then seemed to improve for two weeks and was going around the house. Then just before noon weakness came on. She is not, however, confined to bed. Our boy broke his arm six weeks ago, and she seemed to catch cold while looking after him. She has coughed a good deal since, chiefly at night time. When quiet she does not suffer much pain, but after moving about she has great pain in the neck of the bladder, and gets no relief until she has passed water. At times the urine is very dark colored and bloody, and when left to stand it settles in the dish like jelly. Appetite, until a week ago, has been good. It is now, however, very fair, but nothing she can eat seems to give her strength. She has chills and fever at bed time, and then about four o'clock in the morning she sweats. Her pulse is from 100° to 120°."

From this there can be no doubt as to the tubercular nature of the trouble. Kidney and bladder, as well as intestines and Fallopian tubes, are, no doubt, affected.

This concludes the histories of these cases. They have been

given somewhat exhaustively and may have tried your patience. But forming, as these cases do, such a puzzle when they occur in adults, it is desirable that the symptoms should be accurately recorded.

In connection with these cases I wish to mention another operated upon by a strange coincidence on the 28th of March, 1890, the very day upon which I opened the abdomen of Case No. I. The patient was sent to the woman's hospital under my care with a temperature of 103° and a pulse of 120, presenting all the signs of a sub-acute peritonitis. The abdomen was filled with fluid and extremely sensitive, and the patient was moaning with pain. On opening the abdomen I found it filled with serous fluid. Intestines were much distended with flatus. The peritoneum was studded with nodules and teats exactly like those found in the case just operated on half an hour before (Case No. I). A suppurating ovarian cyst was found on the left side and a suppurating hematocele was distending the right broad ligament. The tarry fluid characteristic of hematocele, mixed with pus, came out when the trocar was plunged into the mass. Here was what appeared to me to be a sub-acute peritonitis caused by the condition of the pelvis (a condition presumably not of tubercular origin) with a peritoneum presenting to the unaided eye the exact appearance of a tubercular peritoneum. Certainly a curious experience for one day. This woman had unfortunately waited too long and died twelve hours after an operation done, when she was so weak that she nearly died upon the table. Owing to the death of the patient we have none of the after symptoms found, in two of the three cases related, to guide us in determining the tubercular or non-tubercular nature of the disease.

I have seen in the practice of others several cases of tubercular peritonitis.

From my three cases we can learn several things.

All of the patients appeared to be very ill. The temperature was elevated in each case. Abdominal pains were present in each case—in one, in the abdomen like knives sticking into her, in another chiefly in the sides of the abdomen, and in the third case the pains were chiefly pelvic. As regards menstruation, in Case I. she did not menstruate for nine months; in Case II. amenorrhea for many months, but only unwell three times in her life, due, no doubt, to the imperfect development of the internal genital organs. In Case III. we have an increased menstrual flow. In the two cases

in which fluid distended the abdomen amenorrhea was present. In two cases we had a collection of fluid accompanying the disease, while in one case the condition produced an adhesive or dry peritonitis. The ages varied — sixteen years, thirty-two years, thirty-six years. Two cases were multiparous women; the other a single young girl. In Case No. I. the enlargement was noticed only two months, in Case No. II. for three or four months, and in No. III. the disease had been in progress about two years, though no enlargement of the abdomen was noticed. Enlargement, therefore, was rapid. In Case I. the internal genitals were found to be healthy, in Case II. they were not developed, and in Case III. they were diseased. In each case the bowels were adherent to one another, were congested in appearance, and in Case III. were thickly studded with tubercle. The omentum was much thickened in Case I., was not much affected in Case II., and was adherent to the abdominal wall and studded with nodules in Case III. In two cases, I. and II., the peritoneum was very much thickened, while, though thickened in III., not to such an extent.

The question might arise: Was No. II. a case of tubercular peritonitis, or simply a case of sub-acute peritonitis, such as that found in the case of a suppurating ovarian cyst, mentioned above? That a sub-acute inflammation will produce just such nodules is, I think, proven by the case related, unless it was also of tubercular origin. But in Case II. there was no history of injury and no evidence of any abdominal affection that would have been likely to have originated a sub-acute inflammation. We have, therefore, to lean to the belief that it was of tubercular origin, for want of something more definite.

The fact that the patient has remained well for a period of five months, does not prove the curability of tubercular peritonitis. Nor is this proved by the recovery of the patient. We must be able to say, without a shadow of a doubt, "such and such nodules were tubercular and not inflammatory." Several writers claim that they have found the bacillus tuberculosis in cases that have recovered subsequent to operation.

There can be no doubt that tubercle is, as Roberts says, the most common and important new growth connected with the peritoneum. Fagge and Bristowe have both classified many cases. One of the most valuable papers on the subject is that of Fenwick. He classifies forty-seven cases found in the records of the London Hospital. He divides tubercular peritonitis into acute and chronic; and the chronic into adhesive, ascitic, suppurating.

Roberts's division is :

1. General acute tuberculosis, of which tubercular peritonitis forms an unimportant part, in which the peritoneum is studded with miliary tubercle.

2. Secondary to tubercular ulcers in the intestines.

3. As an independent disease that may be associated with phthisis, but is usually primary and generally occurs in young persons. Osler, in following Spillman in his classification, leaves out pelvi-peritoneal tuberculosis and peritoneo-pleural tuberculosis, and I think rightly so, and simply accepts :

1. Acute miliary tuberculosis (given by Roberts).

2. Chronic caseous and ulcerating tuberculosis (found in the purulent division of Fenwick).

3. Chronic fibro-tuberculosis (the adhesive form of Fenwick).

We now come to look for a moment at the *morbid anatomy* from which these classifications have been made.

I will give a short synopsis of the forty-seven cases of Fenwick, and it will be very similar to any synopsis given of any number of cases.

Peritoneum.—Thickened in twelve cases. In one case it was one inch thick; in one case, three-quarters of an inch thick.

Omentum.—The chief cause of the formation of a hard tumor. Thickened in eight cases.

Liver Capsule.—Frequently thickened. In one case as hard as cartilage.

Spleen Capsule.—Frequently thickened, and parts in neighborhood frequently matted together.

Mesenteric Glands.—Rarely enlarged sufficiently to form tumors.

Liver.—Frequently cirrhotic. In twenty out of 165 cases this was found, and there was a history of intemperance in every case but one.

Spleen.—Frequently studded with tubercle and sometimes studded with abscess cavities.

Kidneys.—Frequently studded with tubercles, also found granular, and one case pelvis were dilated and the kidneys cystic.

Bladder.—Found with tubercular deposits and also found ulcerated.

Generative Organs.—Affected in nine cases out of sixteen. This is not a satisfactory statement, because the original classification was not accurately made. In one place the uterus and

appendages were taken together, and then in another Fallopian tubes were taken alone. Fenwick thinks that this, perhaps, accounts for the difference existing between his statement and that of other authors in this connection.

Fagge says that the Fallopian tubes are nearly always affected. Moxon, that the disease affects chiefly the outer ends of the tubes, showing that the disease spreads into them from the peritoneum.

Fagge says that the epididymis or testes are often affected in the male. He apparently thought that the establishment of puberty predisposed to the implication of the tubes, because he says that out of eight cases in women, all but one in whom puberty had been established, had coexistent tubal disease. Osler gives 1-4 with tubes affected; Immermann, 7-16 with tubes affected.

Lungs.—Fagge found them affected in 7-9 cases; Bristowe found them affected in 42-48 cases; Fenwick found them affected in 33-38 cases.

Caseation was found between intestinal coils in three cases; of the abdominal parietes, one case; cretaceous deposit in one case.

Ascitic Fluid.—Fenwick found in thirteen cases out of forty-seven; in two cases it was bloody serum. This is evidently found much more frequently in malignant diseases of the peritoneum; in three cases it was pus. Pus is found much more frequently in children.

Sex.—Fenwick gives sixteen females out of forty-six cases; Osler gives 131 females out of 191 cases; Bristowe, Fagge and Fenwick all give a preponderance of males. Osler thinks the recent laparotomy records are more to be relied on, and uses them. But this can hardly be accepted. Many cases of the disease die in obscurity if they have no ascitic collection to necessitate operation. The cases operated on are brought more prominently forward and are more frequently recorded.

Age.—Fenwick says the largest number affected are from fourteen to twenty years of age.

Osler says from twenty to forty years.

Family History.—Many cases show no hereditary predisposition.

Previous Health.—Fenwick says six out of forty-seven suffered from cough previous to the outbreak of the disease, but in no case was preëxisting advanced phthisis found.

Onset of the Disease.—In some cases very sudden, having to go to bed at once suffering from pain and tenderness over the abdomen

and distention. Only one case lay with the knees drawn up. In some, symptoms were like those of gastric ulcer—pain and vomiting; in others like typhoid fever, having even the rose colored spots.

In some a hardness was found in the right iliac region simulating disease of the cecum; some cases had no pain; some cases began with an obstinate diarrhea, or vomiting and diarrhea; temperature was usually elevated; pulse somewhat quickened.

Menstruation in some was increased; in some, stopped for many months before the first outbreak.

Duration.—One case died in one month; four cases died in two months; one case died in six months; one case died in seven months. They had been well previously. It is, however, difficult to say definitely when the disease begins.

Pigmentation of the skin is noticed in some cases (also in my Case III.), and is supposed to be due to tubercular disease of the supra renal capsules.

From what I have already said, the main symptoms in typical cases will vary according to the nature of the case.

Differential diagnosis will have to be made from many diseases. In children the condition can be readily guessed at. "They look old; have shrunken features; a tumid belly," says Fenwick; "their limbs are wasted; they suffer pain; they are tender on pressure, and have obstinate diarrhea." In young girls, however, the diagnosis is not always easy. It is only a few weeks since I saw a case simulating closely my second case just related. The chief point was, however, the sudden onset of the symptoms. I could not account for them and for their severity, unless they were the result of the strangulation of the pedicle of an ovarian tumor. The girl looked in the face just as M. B. did. Her abdomen had just such an indefinite feeling of a thickened peritoneum. She had severe pain and evident peritonitis. She had been in this condition for some time. At the operation we found a gangrenous ovarian tumor with soft friable edematous walls and a black pedicle just about twisted off. Fluid was free in the peritoneal cavity, and the peritoneum was thickened and very much congested. Such, then, is very likely to be mistaken for tubercular peritonitis.

Such semi-solid tumors as those produced by thickened omentum and agglutinated bowels can readily be mistaken for peritoneal cancer.

Cases of the adhesive variety, as Case III., cannot be accurately

diagnosed unless some affection of the chest coexists to give us the clue, unless we are led by some pelvic symptom to open the abdomen. The main points that led me to my diagnosis in Case II. were: the irregular tympanitic sounds, something out of the common; the presence of a fluid with lax walls surrounding it; the indistinct wave of fluctuation, giving one the idea of a thickened intervening wall, a totally different feeling to that produced by a wave through a collection of fluid in the sac of an ovarian cyst, a distinct but a far-away wave, not like the feeling produced by colloid contents; the peculiar feeling of the abdominal wall when grasped in the hand; the flattening of the tumor by the tension of the recti; the high temperature and coated tongue; the cachectic and emaciated appearance, rapid pulse, and the fact that I had recently had Case I. to guide me. Now, in closing, I would like to say a few words regarding treatment. Tapping the peritoneum is exactly analogous to tapping the pleura. We cure pleurisy, so often tubercular, in this way; then, why not peritonitis? If we wait long enough in many cases of pleurisy, nature performs the cure, and so in the abdomen nature does the same. In either case absorption takes place and adhesions are formed. Many cases of complete absorption of fluid from the peritoneum in cases of tubercular peritonitis are on record—cases in which the post-mortem examination has verified the previous existence of tubercular lesion. Tubercular disease in the lung often becomes innocuous. Then, why not in the abdomen? Some held that to cure these cases we must open and wash out the abdomen. Then cases were cured without washing or the use of medicaments. Then the simple aspiration of the fluid was found sufficient. But we have records showing that cases have, so to speak, cured themselves. Does operation hasten the cure? One thing is certain, and that is, that many operated on die of subsequent phthisis, just as they do if left alone. From the statistics of Maurange forty-one per cent. were doing well one year after operation. I believe that exploratory incision should be made in every such case. It clears up the diagnosis and prolongs life. I believe that neither washing out nor drainage are necessary. The best treatment is incision, or, in other words, a paracentesis abdominalis done without using that dangerous instrument, the trocar. With the knife and the finger the operator knows where he is going and what he finds.

THE RENAL STATUS OF OPIUM HABITUÉS.¹

By J. B. MATTISON, M. D., Brooklyn.

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This paper enters a field which, so far as I am aware, has not been largely worked at home, and is preliminary to one that will include, it is hoped, the opinions of other leading pathologists here and abroad.

Its present scope is, mainly, the views of American observers whose high repute entitles them to large respect. It will present opinions pro and con; it will offer such clinical, chemical, and microscopical evidence as has passed into history touching the topic under discussion; and it will give details of some pertinent cases that have come within the reader's personal range.

Until recent years it was largely held that while the habitual use of opium gave rise to well-marked, and often grave functional disorders, it did not, like alcohol, cause structural lesion. Of late, however, there has been a growing consensus of opinion that this view is a mistaken one, and that in a fairly large proportion of cases, its continued taking — especially morphia hypodermically — will induce renal changes ranging from slight hyperemia to profound organic derangement ending in death.

Reaching the nub of this question three queries were presented:

Will the habitual use of opium in any form cause organic renal disease?

If so, what results must follow?

What is the cure, if any?

R. HERTS BAKER, M. D., I have made numerous observations on the effects of opium on the kidneys, but with negative results. The reason for this appears to me to be twofold. The action of opium or morphine used habitually tends to diminish, even to lessening the activity of the kidneys. The effect on the kidneys is, therefore, rather soothing and gratifying to these organs. In lessening action, the blood-supply of the kidneys is diminished, congestion is prevented and the organs carry on their functions with less strain.

FRANCIS T. MONTAGUE, I have not seemed to me that opium is a cause of any kind of disease.

THOMAS H. SCHLESINGER, M. D., In two autopsies of patients who had been in poisoning the kidneys showed no structural

change, although in one patient these organs were swollen and congested.

HERMAN M. BIGGS : Of all the autopsies that I have seen in these cases, I have been impressed with the marked chronic congestion of the kidneys. This is frequently, and, I think, generally, associated with a uniform increase in the interstitial connective tissue of the organs. The kidneys are of a very deep, uniform red color, and the consistence is decidedly increased. But I very much doubt whether the habitual use of opium in itself will cause extensive organic disease of the kidneys; I mean such disease as will seriously compromise their functions. I have never seen a case of opium addiction at the autopsy, where extensive disease of the kidneys was found, that I believed was due to the effect of the opium. I do not think the changes I have stated, as a rule, seriously interfere with the performance of the renal functions.

E. H. BARTLEY, Professor of Chemistry and Toxicology, Long Island College Hospital: So far as my observation goes, I have seen no reason to believe that the alkaloid exerts any direct influence to produce organic disease of these organs. It seems to be eliminated easily and rapidly by the kidneys, and without irritation. This is especially the case when given by the stomach, in which case it is eliminated almost as fast as it is absorbed. If the practice of opium or morphine-taking has any influence in producing organic disease of the kidneys, it is rather to be regarded as an accidental or indirect one. While morphine does not seem to possess any irritant action upon the renal structure, it lessens the amount of urine passed, it retards oxidation and the elimination, and, probably, the formation of urea. Urine, so modified, is more irritating than normal, less concentrated urine, and may possibly tend to the formation of the gouty kidney, as interstitial nephritis. This effect is aggravated by the disordered digestion induced by the alkaloid. When morphine is self-administered, by means of the hypodermic syringe, another accidental influence is at work. Without proper care of the syringe as to cleanliness, abscesses occasionally occur at the seat of the injection, and these tend to produce nephritis of septic origin.

JOHN A. MCCORKLE, Professor of Theory and Practice, Long Island College Hospital: I think the habitual use of opium will cause organic renal disease; that the small granular kidney is most likely, and that the reason is a low grade of inflammation induced by the elimination of a foreign substance.

J. H. VAN COTT, JR., Pathologist, Long Island College Hospital : Based upon the supposed physiological action of opium and its alkaloids, I believe that its habitual use must be productive of renal disease. Its direct action on the vaso-motor apparatus must finally result in chronic dilation of such vessels as are controlled by the nervous system and contain non-striated muscular fibres.

Its effect upon the digestive apparatus, and the well-known disturbance of primary and secondary assimilation, can hardly eventuate otherwise than in the most profound disturbance of all the so-called parenchymatous tissues ; a disturbance perhaps well expressed by the term faulty retrograde metamorphosis. From any reasonable standpoint the metabolism of cells is bound to be inhibited by the action of these narcotics, partly through vaso-motor disturbance, also through the *direct* effect of the drug on cell activity.

If, on the one hand, conditions of profound nutrition and vascular disturbance are brought about to inhibit the proper metamorphosis of all the tissues in the body, yielding only poorly constituted products for elimination ; if, in other words, the true "end-products" are not attained ; and if, on the other hand, the metabolic action of the very cells whose business it is to eliminate these "end-products" is inhibited — if the epithelial cells of the renal parenchyma are thus handicapped, it is inconceivable to me that they should not in time become permanently modified both in form and in functional activity.

Theoretically, the renal changes should be all those resulting from chronic renal hyperemia — a peculiar form of diffuse nephritis, with an added parenchymatous degeneration.

Two cases of the opium disease have come under my observation, in both of which grave renal symptoms obtained. One died, and the autopsy revealed widespread chronic lesions of all the organs, the kidneys not excepted ; the other is still living, having had in the course of the Summer a uremic attack, which nearly proved fatal.

I cannot dogmatize on the subject until more experience has been gained in the thorough, systematic, and impartial observation of the renal functions in such cases ; but my experience, such as it is, all points toward the correctness of my reasoning.

Text-books make little or no mention of this topic. Wilson in an excellent paper — Pepper's *System* — refers to it briefly. Niemeyer tells of interstitial nephritis due to "septic material in the

blood." Roberts writes of albuminuria due to disturbed innervation. Bartholow, in *Hypodermic Medication*, gives negative evidence as to albumin and sugar in urine due to morphia, and thinks Levinstein's statements not applicable to cases met in this country. He further says — and this is of no mean moment as pointing to a factor in renal break-down :

The frequent use of the syringe, often the hasty introduction of the needle, and the use of a rusty and dirty needle, the injection of badly prepared solutions, the repeated injections into certain localities, have a disastrous effect. Large hard nodules form, which slowly suppurate. Extensive sloughing may take place, and septicemia and pyemia sometimes occur with a fatal result. In a large proportion of these morphia-maniacs, suppuration abscesses of considerable size, and ulcers, are produced. I have often seen the arms, the abdomen, the thighs, and legs, a mass of ulcers and of abscesses in various stages of formation.

Dujardin-Beaumetz cites a fatal case of this kind, and Calvas has noted many such with traumatic fever.

The most extensive, interesting, and valuable notes on this point are those of Levinstein, who observed many cases, and made frequent trials on rabbits and dogs, always getting albumin, and usually sugar. The latter he regarded as specially significant, and its relation to morphia-taking, acute or chronic, of high medico-legal importance, as strong presumptive proof of the toxic agent in cases of suspected fatal poisoning from that drug.

In the absence of positive pathological facts, Levinstein thought that albumin might be due to one or all of three causes :

1. The action of morphia on the central organ, which has a relation to albumin.
2. By the concurrence of anomalies in the normal pressure of the blood, causing at last intra-renal disorders.
3. By paralysis of the nerves which surround the arteria renalis. This would have the same effect as knife-cutting of those nerves, after doing which, von Wittich found albumin in the urine.

Levinstein thinks it very probable that varying blood-pressure is the leading factor. This, he suggests, explains the intermittent albuminuria common in these cases, while *continuous* albumin is due to nerve-palsy of the renal artery.

Autopsic opportunities in these cases are not frequent, and the following, under the notice of Dr. Van Cott, and reported in the October Brooklyn *Medical Journal*, is of interest :

Mrs. B., aged forty years ; semi-invalid for years, during the last

four of which she used morphia subcutaneously: was attacked with sudden illness, having persistent vomiting, some purging, scanty, high-colored albuminous urine, which progressively increased. Later, clonic spasms of left arm extending to entire body, like uremic convulsions: urine almost suppressed: extremities edematous. Death by coma and convulsions.

Autopsy.—Left kidney larger, right smaller than normal; soft; surface studded with countless small punctiform hemorrhages. Around Malpighian corpuscles numberless hemorrhages. Microscopic, fresh, knife-knife section: Most of glomeruli are hemorrhagic, extravasated blood being seen around the Malpighian tufts within Bowman's capsule. Cortex and medulla markedly congested. Epithelial cells in many tubes desquamated: many tubules have hyaline epithelial and granular casts: others, much granular detritus.

Conclusions.—Case of moribund infection. Patient, in self-giving morphia, gave needle through gas in left deltoid, causing systemic infection, and progression in kidneys already crippled by morphia excess.

Some *Seatonian* or *Seatonian* cases of the morphia disease have been noted, the writers know, in which careful chemical and microscopic tests were made. Of these, seven gave proof of renal changes suggesting that at least a moribund or structural lesion and death.

Case 1.—Opium addict, aged thirty years. Had been morphia-taking for 12 years. On 10th of 1905, he was found morphia-taking — eight grains subcutaneously daily. As he had not obtained such pleasure in profound kidney changes, that he thought it was time to his morphia-taking was made. He was found dead, though, when he showed signs of general failure, which might be due to the application of the burning stigma of about 1000 degrees, or more.

Case 2.—Opium addict, aged thirty years. Four years morphia-taking. Had been taking for 10 years, about 10 grains subcutaneously. Quit treatment immediately, and was found to be morphia-free. He was again under treatment, and died, however.

Case 3.—Opium addict, aged thirty years. Four years morphia-taking. Had been taking for 10 years, about 10 grains subcutaneously. Quit treatment immediately, and was found to be morphia-free. He was again under treatment, and died, however.

Case 4.—Opium addict, aged thirty years. Twenty-seven years' morphia-taking. Had been taking for 10 years, about 10 grains subcutaneously. Quit treatment immediately, and was found to be morphia-free. He was again under treatment, and died, however.

Case 5.—Opium addict, aged thirty years. Ten years' morphia-taking. Had been taking for 10 years, about 10 grains subcutaneously. Quit treatment immediately, and was found to be morphia-free. He was again under treatment, and died, however.

CASE VI.—Physician; aged twenty-eight years; four years' morphia-taking—sixteen grains, subcutaneously, daily; unrecovered.

CASE VII.—Layman; aged seventy years; three years' hypodermic taking—four grains daily; recovered.

CASE VIII.—Physician; aged thirty years; one year, irregular, subcutaneous taking—three grains daily; recovered.

Of these eight cases, seven had crippled kidneys, and all used the drug by needle. The twenty-seven years' taker by mouth showed no kidney lesion.

Repeated chemico-microscopical searchings in such cases have disclosed certain changes from normal renal action, and so often, that we think they may be accepted as the rule.

The urine is diminished.

The urea is lessened.

Specific gravity is varied; if changed, usually lowered.

Albumin is present.

Sugar also.

The chlorides are decreased.

Casts,—granular,—hyaline, and waxy,—are present.

Urine sediment holds epithelial cells and granular detritus.

Concluding, our own opinion, in reply to the three-fold query, is:

First: Yes.

Second: Cirrhotic.

Third: A triple factor—vasomotor changes; impaired general nutrition, and inflammatory action due to non-eliminated irritant products.

NEURASTHENIA AND NASAL DISEASE.¹

By FRANK HAMILTON POTTER, M. D.

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THIS subject was selected in the first place because there has recently been some discussion upon it, in the course of which very divergent views were expressed; and in the second place, because it will serve to give an opportunity to state some of the writer's opinions concerning the relation between certain constitutional diseases and disease of the upper air tract. Let us first examine the evidence bearing on the dependence between Neurasthenia and Nasal Dis-

1. Read before the Buffalo Medical Club, October 16, 1900.

ease. In 1889, Dr. Wm. H. Daly, of Pittsburg, read a paper before the American Laryngological Association, in which he held that many times chronic disease of the nasal passages preceded or was at least concomitant to the condition expressed by the term Neurasthenia. He presented two cases in detail, illustrating this view, but referred in all to ten cases occurring in his practice. His summary of this evidence was to the effect that in all of these cases there was obstinate inflammatory aphonia, attended with utter prostration, nervousness, and insomnia : seven of these patients had nasal disorder of a chronic character : the remaining cases all had as leading factors naso-pharyngo-laryngeal disease in some form, with neurasthenia in some form also. He then adds, that while one swallow does not make a summer, a flock of them will cause us to look for a change of weather : and will not this little flock of cases cause us to look out for this too widely prevailing constitutional condition, as one of the unfortunate possibilities or concomitants of disease of the upper air tract ? That they coexist, there can be no question.

In the discussion on this paper two opinions were expressed. Dr. Roe and Dr. Sajous supported Dr. Daly, maintaining that the constant nagging of a local irritation would produce, sooner or later, a depressed condition of the nervous system ; Dr. Hinkel and Dr. Langmaid believed that while the local disease could be a factor, it was only one of many -- not the main--causes, and that the removal of the local disease would frequently fail to relieve the neurasthenic conditions.

Here, then, we have two divergent views upon this question. The issue is joined ; which is correct ? But this is not all, — the question is not yet fully stated. The year after Dr. Daly read his paper, Dr. W. F. Chappel, of New York, published a paper entitled *Neurasthenia and Neuralgia from Traumatism of the Nasal Passages.*¹ This paper was enough to startle the most enthusiastic rhinologist. Dr. Chappel related cases showing that neurasthenia, neuralgia, and peripheral neuritis sometimes resulted or followed upon operations upon the nasal passages. He admitted that these cases might have been neurotic, but they exhibited none of the symptoms of the above-named diseases until after the intra-nasal operations. He, therefore, concludes that "operations in the nasal passages should not be undertaken lightly, and with the impression that if they don't do any good, they will not be baneful ; also

¹ New York Medical Record, May 10, 1890.

that great experience and judgment may be required to determine the cases suitable for operation, and likely to be benefited thereby. . . . If the patient is very neurotic, or gives the history of having suffered from what is called nervous prostration, although the physical conditions might be excellent, I would discourage operative measures, unless imperatively demanded."

This view of the subject is, in our opinion, often lost sight of altogether. It should make us pause and reconsider the reasons for, and perhaps the methods of, performing intra-nasal operations. Dr. Chappel has been supported in rather vigorous language in a recent editorial in *The Journal of Laryngology and Rhinology* for June, 1890. One or two remarks from that article will indicate its position. "The causes of neurasthenia, obscure as they are, are not to be sought in some slightly abnormal condition of an organ such as the nose, and to imagine that local treatment of this, or indeed of any individual organ, is going to reward us with successful therapeutic results, is to subject ourselves to such failures as Dr. More Madden very honestly has recorded. . . . It seems to us that to draw the attention of such a patient off general treatment, and to concentrate it upon one organ, even if that be only the nose, is to put him in worse condition than when we started. . . . It would be a pity if rhinology were to incur the reproach of a 'narrow specialism,' and to fall under a ban similar in this respect to a narrow-minded gynecology. . . . To remove a vital cause of irritation is right and proper, but to assert that the slight pathological abnormalities met with in many nasal organs, even where they are accompanied with nasal catarrhs, is in real proportion of neurasthenic individuals a potent cause of their troubles, is, we think, to take up an untenable position."

This article overdoes the matter, and swings too far in the opposite direction. It is not necessary to support the position maintained by the author to under-estimate the value of any factor that may enter into the production of the disease under discussion. The expressions, "only the nose," and "slight pathological abnormalities," are out of place, and lessen the force of the argument. It, however, serves to show how radically different views can be held upon this question.

While this is not, by any means, all of the literature on the subject, it is not necessary to quote further,—it is more important and ~~ears~~ ^{ears} directly upon the management of these cases, to ascertain, if the truth concealed in the opposing views.

In the discussion of diseases of nervous origin, or, at least, exhibiting for the most part nervous phenomena, it is very difficult for some writers to avoid extremes of statement. With them one swallow does indeed seem to make a summer. Specialists have incurred criticism by the narrowness exhibited in an argument to maintain a very sound proposition. It is true, however, that their vehemence has been aggravated by the reluctance of the general profession to accept their views, even when demonstrated to be correct. It is difficult to tell which is the safer leader, a specialist or a generalist, when both refuse to see the light.

It has been shown beyond a reasonable doubt that such diseases as chorea, epilepsy, asthma, hay-fever, neurasthenia, the various forms of neuralgia, etc., are sometimes due to disease of the nasal passages. To claim that they are always or even generally due to pathological changes within the nose, is fanciful and extreme. The percentage, however, is sufficiently marked to warrant the statement that in every case of the diseases referred to, the upper air passages should be thoroughly examined in order not to overlook the possibility of a nasal element as one of the causative factors.

As far as neurasthenia is concerned, I believe I have seen cases illustrating both extremes, as detailed above. In the first place, two instances occurring in my own practice, and three or four cases pointed out to me by others as occurring in their practice, is convincing as to the statement that neurasthenia may follow upon surgical interference with the nasal passages. The case which first called my attention to this possibility is worth mentioning. A woman, about thirty-five years of age, presented herself with marked nasal obstruction. This was due to an irregular septum from which into each nostril a spur projected. It was also complicated by marked hypertrophy of the soft parts. The secondary symptoms, due to pressure between the walls of the nasal passage, the blocking up of the secretions, and the continual mouth-breathing, were very marked. The removal of the obstructive lesions by surgical means was advised and consented to. The septal spurs were first removed, and at that time it was the intention to remove the hypertrophies also. This was abandoned afterwards for sufficient reasons. Following close upon the removal of the second spur, the patient began to complain of pain and constriction about the head: she had great depression of spirits and hopelessness about her case and about herself generally. She was unable to perform her duties: was constantly dreading something new, and was indeed in a most

unfortunate condition. Local treatment, excepting of the mildest kind, was abandoned, and attention was directed to restoring her general health. She was under observation about a year. Her health finally returned, though it was a hard fight and an experience I do not wish to repeat. Another year has elapsed since treatment was discontinued, and she still remains well. The local condition is fairly good, nasal respiration having been partially reestablished.

I still think the nasal treatment was necessary, though it might have proceeded with less energy. One observation occurs to me, bearing not only upon this case but upon others of a similar nature. May not the constant irritation of an obstructive nostril with the associated symptoms, direct and indirect, so influence the nervous system as to cause an explosion, so to speak, on the additional disturbance of an operation? Is it fair to condemn nasal surgery when this result occurs, as these cases are generally of long standing with a nervous system abnormally sensitive?

The second case need not be detailed, as it was not so well marked and was more easily controlled. I think the experience of the first case was of advantage as to this one.

The other class of cases, namely, those in which the neurasthenic symptoms disappear after nasal respiration has been restored, are more pleasant to contemplate and fortunately much more numerous. It is of this class of cases that authors speak with such positiveness; and, indeed, we cannot blame them, as the results are brilliant; only the reverse side of the picture should be always in mind. Now that John N. Mackenzie has reminded us that we are told in the Book of Genesis that when God made man it was not into his mouth, but into his *nostrils*, that he breathed the breath of life, we will perhaps pay more deference to this truth of Scriptural physiology. It is not remarkable that when this "breath of life" fails to obtain entrance by its natural channel, that disastrous consequences result; or that, in a certain proportion of these cases, the symptoms of such failure are expressed by disturbances of the nervous system.

The nose is concerned in olfaction, respiration, audition, and voice-production, and when obstructed these functions are imperfectly performed. Add to this the contact that usually exists between the walls of the nostrils in badly obstructed cases, thus bringing surfaces together that were meant to be separated, and we have all the conditions present sufficient to account for the nervous

phenomena sometimes seen. Whatever the explanation, the clinical observations remain, and justify the opinion that in a given proportion of cases the chief factor in the development of neurasthenia is obstruction to the upper air tract, and that the removal of this obstruction is the first step in the relief of the disease.

A few cases will illustrate this class of patients :

Case I. Dressmaker, aged 27, of nervous temperament, appetite and digestion fair, complains of pain about head and face, restless, suffers much from insomnia, is fearful that she must abandon her work, etc., hypertrophic rhinitis affecting both nostrils : mild treatment at first combined with strychnia and iron internally : no result : then hypertrophies removed, from which time improvement is dated. The patient was seen a short time since after an interval of six months, and reported herself as well.

Case II. Mrs. ———, aged 43, markedly neurasthenic, gave the history of a long period of illness and treatment by many physicians. Had been a mouth-breather for a long time. Complained of fullness about the head, neuralgia of head and face, ringing in the ears. Had severe paroxysms of coughing ; was pale, weak, and despondent. She was sent to me with special reference to the stoppage of the nasal passages. They were found entirely filled with mucous polyps. These were removed slowly,—two or three at a time, every fourth day. Fifteen were taken out in all, and the appropriate after-treatment was continued for some time afterwards. The change was a very rapid one. She began to improve in weight, in color, and in strength. The neuralgia and ringing in the ears disappeared. The cough was more obstinate, but that also was finally controlled. Of course, the general supporting treatment was continued all this time, but it is to be noted that she had been receiving the latter for many months, and that real improvement began only after nasal respiration was reëstablished.

Case III. Railroad engineer, aged 35 years : naturally of a strong constitution : had suffered for the last two years from facial neuralgia and severe headache. Had lost so much in strength, weight, etc., that he was fearful that he must give up his situation. Is nervous, irritable, and despondent. The nose was almost occluded from deformity of the septum and hypertrophy of the soft parts. The pharynx and naso-pharynx were highly congested and sensitive, and the latter was covered with tenacious mucus. The hypertrophies were removed, the septal deformity corrected, and the patient made a good recovery.

Case IV. Clerk, aged 30 : tall and pale, appetite poor digestion easily disturbed, nervous, and suffers from insomnia. Is confined at desk work, and has very little exercise. Takes cold easily. Has pain and sense of fullness between and above the eyes. Complained of nasal obstruction, and said that he felt sure that he would feel better if he could breathe naturally. Was advised that the nasal condition, in all probability, was but one of a number of

factors entering into his case, and on that understanding I consented to treat him. The right nostril was found filled with a large bony ridge running along the sutural line between the vomer below and the ethmoidal plate above and the triangular cartilage in front. In the left nostril the middle turbinated bone was greatly enlarged and pressed firmly against the septum. There was, besides, as was to be expected, a chronic inflammatory state of the entire nasal mucous membrane. These obstructions were removed, and the parts treated in the usual manner. The relief was as great as in any case coming under my observation. General treatment was, of course, employed, the patient's diet, exercise, hours of rest, etc., carefully considered, and at the end of a few months he was discharged well. He always maintained, and in this confirmed my own judgment, that the starting point in his recovery was the restoration of nasal breathing.

Case V. Miss ———, aged 25, servant; family history excellent; personal history, with the detail of symptoms, would fill a volume; fairly well nourished; complexion sallow; says is always tired and does her work with difficulty; severe attacks of frontal headache; has recently lost considerable in weight, and has become very despondent; voice muffled; mouth breather; throat constantly filled with unpleasant discharge; pain in the ears, etc., etc. Examination showed the naso-pharynx filled with the so-called adenoid tissue. The nose seemed merely in a state of passive congestion as it became freer under the use of cocaine, and exhibited no deformity. The adenoid tissue was removed, the nose and throat treated for some time afterwards with cleansing washes and mild astringent solutions. General supporting treatment was also given. The patient is now well, the nervous symptoms have disappeared, and she is able to earn her living, which before treatment she was hardly able to do.

These, of course, are selected cases — the symptoms in them were marked, and the relief following treatment also marked. They have been selected with a view of showing some of the pathological conditions of the nose and throat that may cause or be associated with neurasthenia.

In view of the fashion in some quarters to speak of the nasal lesions seen in the class of cases just considered as "slight pathological abnormalities," it may be pertinent to inquire whether any lesion that interferes with the physiology of an organ should be characterized as "slight." A stricture of the urethra, for instance, may not be as *great* as an ovarian tumor, but it may, nevertheless, produce such disastrous consequences as to warrant operative interference. The same thing can be said of many diseases of the eye, and of the ear, and so on. I would not magnify these things unduly, nor would I be blind to their true significance. As far as

nasal surgery is concerned, it seems to me we should be guided by two propositions: First, the restoration of nasal respiration; and second, the removal of any conditions causing contact or pressure between the walls of the nasal passages. In the application of these principles the bias of the individual must be taken into account. We have already learned that in the neurotic subject we must proceed with caution, and there may be many other lessons in store for us which we will have to learn through a more extensive experience. However, between those who would do nothing and those who would practise extravagant surgery, there must be a rational middle course which we ought to follow, especially when we are considering the relation of any one organ to any particular disease.

In conclusion, it will be observed that an attempt has been made to present the subject of the relation of nasal disease to neurasthenia from both sides, and to contend that all the disease seem sometimes to depend upon pathological changes in the nasal passages should be so studied. It would be unfortunate if, after all, the writer were to be placed among that class of physicians well represented by a gentleman in the West, who, I am informed, announces that he cures asthma by a simple process of "stretching the rectum." Such a statement betrays faulty methods, and deserves notice chiefly for the warning it conveys. We trust that in this instance the warning has been heeded, and that the results of our experience, as presented in this paper, will be confirmed by the observations of others.

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INFANTS' FOOD. — Dr. Geo. B. Fowler, in an article recently published in the *Medical Record*, gives the preference in most cases to the following easily prepared food: "Put four tablespoonfuls of rice into three pints of water and boil half an hour; then set aside on back of range to simmer during the day, water being occasionally added by the cook to maintain the original three pints. At night strain through a colander and place on ice. When cold a paste is formed. Three tablespoonfuls of this paste are added to each nursing bottle half pint of milk, and fed during the next day, a fresh supply of rice paste being under way in the meantime. Should there be constipation, I use farina, prepared in the same way, and used in the same proportion. Rice is astringent, farina laxative." — *Medical Age*.

Translations.

KOCH'S TUBERCULOSIS CURE.

LETTERS OF PROF. REISE, OF THE UNIVERSITY OF COPENHAGEN, GIVING
THE BERLIN METHODS IN DETAIL.

(*From Hospitals Tidende.*)

TRANSLATED BY HERMAN MYNTER, M. D.

FIRST LETTER.

BERLIN, November 17, 1890.

I CONSIDER it proper to send a short report of what one sees in Berlin during these days. There are probably many who wish to hear something about the peculiar life which pulsates here on account of Koch's-tubercular bacillus inoculations, Koch's lymph, and the results of it. Today I have for six hours continually examined patients, and if I now ask the question what seems sure and clearest in the proceedings of Koch, then the answer will be: Greatest and surest is the application of the method as a means of diagnosis. I have today seen a large number of patients in Bergmann's clinic, on which it is easy to see the correctness of the picture as Koch gives it, of tuberculous affections, which are external, and which you can see with your eyes. I saw patients with lupus, with the attached portion of the face covered with a crust, as for instance, an eruption of rupia, with swelling, heat and redness at the circumference, and at eight o'clock in the morning either suffering from severe fever or with a decreasing fever, which at 4 P. M. had completely disappeared. Some of these patients had been inoculated once, others twice, and one five times. The attack of fever which is produced by inoculation, consists of a quick and considerable rise of temperature, during which almost always a rigor occurs about three hours after inoculation. The rise of temperature reaches its maximum from six to sixteen hours after inoculation, and then decreases gradually simultaneously with the local symptoms which the inoculation has produced, that is, redness, swelling, etc., (inflammation of crust). The inoculation is repeated after the local and general symptoms have decreased, and the dose is increased if the last injection gives little or no reaction. About definite cure I shall give no opinion, having been here only one day, but those

who have seen the patients for a longer time, insist that lupus can be perfectly cured. Only a short time is necessary to ascertain that all lupus tissue, even the smallest extension, becomes changed by inoculation in the way as Koch has described it. It is much more difficult during a short visit to find out its effect on tuberculous glandular swellings. The tissue is sure to swell and become tender after inoculation, and that an attack of fever after injection for lupus invariably develops. On the other hand, their decrease, as a result of the inoculation, not to say their perfect recovery, has, so far, no foundation, except what Koch says.

I have not seen any patient cured of this affection, which does not mean that I do not believe in it. The same may be said about numerous cases of tuberculous joint affections, of spina ventosa, and other affections of the bone. We see in these cases the inoculations being followed by local swelling and tenderness, and the characteristic fever, while both the local and general symptoms decrease in the same way as with lupus, but the final result and recovery can first occur after a long time, and, as far as I can see, it is a matter of faith rather than knowledge of the present time. I have today seen a case of coxitis, in which the fifth or sixth inoculation was made yesterday, and in which no reaction, local or general, had occurred, from which the conclusion was drawn that the tuberculous process had been destroyed and only the inflammatory process left, but "*nous verrons*." While, therefore, the question about complete cure is still undecided, the same is not the case in regard to diagnosis. It must, after what I have seen, be considered proved that even tuberculosis in a human being who submits to Koch's inoculation is followed by both a local and general reaction. There may be, perhaps, a few cases on whom the inoculations have no effect, but, as a rule, reaction occurs by another injection of increased dose. The reaction is then a proof that a tuberculous affection is present, and it is impossible to obtain a better illustration than the one we had today in Bergmann's clinic. I examined with the laryngoscope five patients with laryngeal affections: Number one, had a simple catarrhal swelling in the larynx; number two, a similar swelling on the posterior wall; number three, an ulcer on the posterior commissure; number four, an ulcer on the anterior commissure. All these four patients were supposed to be suffering from phthisis. Number five, had a small nodule in the larynx. All five were inoculated and the first four had the characteristic rise of temperature, going to 104 and 105°F., while the

patient with cancer continued to have normal temperature. Therefore, the inoculation furnishes evidence of the presence or absence of tubercular bacillus, just as we saw it in the fifth case, that of cancer. After a number of inoculations in the same patient, the reaction decreases so that the second inoculation gives less reaction than the first, etc., when we increase the dose and wait for results. If no reaction occurs, the tuberculosis has been destroyed, according to the experience of the clinics in Berlin. It is only to be hoped that it is no immunity, but a final destruction of tuberculosis that is derived from repeated inoculations; in regard to this, it rests for the future to show. While the dose in lupus is one centigram in adults, it is ten times weaker in tuberculosis of the lungs. In the same weak doses must be used in every case of joint or bone tuberculosis in which there is a suspicion that the lungs are affected, otherwise serious results may occur. I have seen little of the method for tuberculosis of the lungs, and it will probably take years before we arrive at a reliable opinion about its effect upon lung tissue, but that Koch's method will be an excellent diagnostic means for latent phthisis I have had the opportunity to verify. After what I have seen I would be careful to inoculate a phthisis patient having high fever, even with a weak injection of one milligram. Injection of a larger dose may produce a reaction lasting two, three, or four days, and may be longer; vomiting and collapse during this period are not unknown. Bergmann showed me a patient with lupus, who had needed strong stimulation, in order to improve the imperceptible pulse, and to counteract the collapse. Is it not possible that this patient did have a latent phthisis? I did not know, as I did not have the opportunity of examining him.

SECOND LETTER.

While, in my first letter, I spoke particularly about lupus and tuberculous affections of glands, joints and bones, I will this time tell what I have seen and heard about phthisis pulmonalis. I have gained my experience particularly from the clinic of Träntzel. Koch's statement that the inoculations in phthisis pulmonalis must be much smaller, generally only one-tenth of the dose for non-phthisical patients, is confirmed everywhere. If according to Koch—an inoculation of one cubic centimeter is used in a case of lupus, a dose of one cubic millimeter is the maximal doses in the beginning in case of phthisis pulmonalis. Even this dose can only

be used in adults and comparatively strong patients. In children and very weak patients this dose must be considerably reduced, and if high fever be present it is prudent to commence with a dose of only one-half cubic millimeter, or even less.

The reaction of phthisical patients against the inoculation is quite considerable.

It is not only that the general reaction—the fever—and the local reaction which we suppose is present from the increased cough, increased expectoration and a considerable tension and pressure in the thorax is greater in patients who suffer from phthisis than in those who have only lupus or some external manifestation of tuberculosis, but phthisical patients do not seem to bear the inoculations as well as the other patients, as they can only stand one-tenth the dose, and besides are liable to get collapse.

Fatal cases, to be sure, have so far not occurred in the clinics I have visited, but some severe cases of collapse have occurred and that not alone in phthisical patients, but also in a patient with lupus. It is, therefore, necessary to use the inoculation with the greatest care and with proper regard to the patient's condition.

After inoculation on phthisical patients the usual reaction occurs in two, four or six hours; a rigor occurs, the temperature increases to 104 or 105, the local reaction shows itself by increased cough and expectoration, by tension and pressure in the thorax.

I have been unable to learn the influence of the local process upon the stethoscopical phenomena, but it is sure that the râles increase in number. The fever decreases in the course of ten to twelve hours, sometimes first after twenty-four hours. The local symptoms, such as increased cough, expectoration, and pressure in thorax decrease too, and the patients often feel improved. The patient's normal condition having returned, a new inoculation may be made, and if the reaction grows less and less with every new dose, it may be increased with one-half or one milligram, until by-and-by stronger doses are used,—even one centigram. One month will generally pass before such a dose can be used. In phthisical patients we see, then, a gradual decrease of the symptoms, diminished cough and expectoration, and the tuberculous bacilli decrease in number in the expectoration.

It is not an easy matter to treat a phthisical patient with Koch's lymph. The number of tuberculous bacilli in the expectoration must be counted before, during and after the reaction following the inoculation.

Already now I may state that none of our present hospital wards is able to treat a larger number of phthisical patients with Koch's method without an increase of the medical staff and of the number of nurses, if a scientific treatment, conducted with painstaking care, is demanded. It is probable that it will be necessary to open special wards in our hospitals for the treatment of a large number of phthisical patients, or rather to build new special hospitals.

The question, what will be the future result in phthisical patients and whether a perfect cure can be obtained, cannot be answered now, neither can I have any personal opinion about it. It will be necessary, first, to observe patients for months or half years.

Nothing is more common than for physicians to see phthisical patients recover so far that the pectoral symptoms, the cough and expectoration, disappear, the weight increase fifteen pounds or more, while at the same time the objective symptoms improve, the râles disappear, the dullness diminishes and grows less intense, the bronchial respiration stops. Yet we may quite unexpectedly see our patients get a new hemorrhage and new pectoral symptoms,—in short, get a relapse after months or years. And so it will go with Koch's method. Years will pass before we know its influence or the cause and progress of phthisis pulmonalis. We can only, till that time arrives, continue to work along the old line, making careful clinical observations, studying carefully the tuberculous bacilli, by aid of hygienic, dietetic and therapeutic measures, and by aid of the genial Dr. Koch's new remedy.

Koch's method seems least at place in extensively progressed cases of phthisis with high fever, and is here probably not without some danger. From what I have stated it is obvious that I have not seen a recovered case of phthisis pulmonalis in Berlin, but — my stay has been too short.

I accord great weight to the impression I have received by listening to, and talking with, eminent clinical teachers and most from Koch's reserved expressions. I believe I am able to state now that the results of Koch's method in phthisical patients must be investigated during a long course of time before we can draw final conclusions. Somebody must take the lead, and the somebody is necessarily Koch and Berlin. To conclude, my impressions are as follows :

1. Inoculation of Koch's lymph produces in tuberculous

patients a certain and easily recognizable reaction, partly a general one in the form of a severe attack of fever, partly a local one, different according to the place of the tuberculous pains; externally or internally in the deeper organs—just as Koch so masterfully has described it. Two exceptions, perhaps, may be made; first, that it is not absolutely proved that a non-tuberculous patient never will show reaction even after a weak inoculation; and second, that perhaps as a great rarity reaction may not occur after inoculation in a phthisical patient. Certain doubtful cases are mentioned, but I have not seen them myself.

2. Koch's inoculations will be of the greatest importance as a diagnostic means of making us able to judge whether a given case is tuberculous or not.

3. It is too early to express an opinion about it as a curative measure. That it is curative in lupus is fully proved. It is probable that it will be found curative in other tuberculous affections too—according to the statement of Koch and others. I have only in these letters considered the clinical side of the question, leaving its pathological aspect till the remedy is known.

Society Proceedings.

BUFFALO PATHOLOGICAL SOCIETY.

STATED meeting October 17, 1890.

Dr. ROSWELL PARK read a paper entitled

TETANUS AND TETANY.

(Abstract.)

Though these two conditions have such similar names, there exists a vast difference between them as regards their etiological features, and many of their symptoms.

Tetany is a neurosis manifesting its effects by tonic spasms, particularly of the extremities and increased mechanical excitability of the peripheral nerves.

It is a disease which is found in those patients who have submitted to total extirpation of the thyroid, and in pregnant and nursing women. It is also sometimes observed in children after exposure to cold, and during some intestinal lesions, as those

of typhoid, and with the irritation caused by intestinal parasites. It is, as a rule, endemic, but it may be so diffused in certain parts of the world as to come under the head of an epidemic disease.

Tetany follows as a very serious complication after thyroidec-tomy (total). Tetanella, idiopathic muscular spasm, carpo-pedal cramps are synonyms which should be understood as such, so that one is not misled into believing that they are distinct diseases or conditions. The patients do not lose consciousness; and the spasms are those of a functional neurosis, coming on a tolerably well defined rhythm or order.

Some observers have claimed that it is due to meningeal hyperemia, and others that it is caused by a primary lesion of the primary cells of the cerebro-spinal tract. A few cases are recorded where the trouble seemed to have developed into chronicity, but, as a rule, all those affected die; we may say that it is malignant, if we keep the mortality rate in mind.

The first symptoms may come on at once, for example, just as the patient is recovering from the anesthesia, or the disease may be delayed ten days or so, after the exhibition of the cause. Prodromal symptoms often put in an appearance, such as malaise, muscular weakness or stiffness; the onset, however, may be sudden and come with extreme violence.

There are two characteristic diagnostic signs which can be elicited in this disease, *i. e.* :

Chvostek's; a tap at the point of exit of the facial nerve sets the muscles of the same side of the face into a spasm; this sign may be induced without much harm to the patient, which, however, is not true with the second: Trousseau's; pressure for a few seconds or minutes on the main vessel or nerve supplying a limb causing it to go into general tonic spasms.

The facial muscles are first to be affected, those of the arms following next, while the spasms in the lower extremities may be less severe or be absent entirely. The hands and fingers assume a position similar to that taken in irritation of the ulnar nerve. The fingers are strongly flexed at the metatarsophalangeal articulation, stiff and straight beyond; the hand is strongly bent to the ulnar side, and the thumb is closed upon the palm. The muscles of the forearm are firm, and there may be a slight tremor. In the legs we find similar muscular conditions; they are extended, and the feet and toes are found in plantar flexion. There may be pain in

the parts : the temperature is somewhat elevated. Each attack, or seizure, lasts from two to fifteen minutes, and is not of so frequent occurrence as those of tetanus.

Naturally, from so great spasm, we may have dyspnea and cyanosis. In the gravest cases consciousness may be lost ; though, as said before, this is not usually the case. Death never occurs in the height of the disease, but usually some days later.

Overwork or great excitement sometimes precipitates an attack. Both sexes suffer from the malady, but females seem the more prone.

To meet indications, it has been suggested to use chloral and morphia, and these remedies have actually been of benefit in some cases. The present writer suggests, inasmuch as several cases have been recorded as having been much improved after profuse diaphoresis, that pilocarpine be exhibited to its full physiological effect.

In relation to its etiological features, much matter has been accumulated, particularly during recent years. The disease supervenes only after total extirpation of the thyroid, not after partial removal.

A great many observers claim that tetany is essentially due to sepsis, or is of a septic nature at least. There are many facts which weigh against the assumption that there is any septic element about the disease, etiologically speaking. It occurs only after total thyroidectomy ; is almost unknown after other operations. Experiments on animals have fully borne out what has just been said concerning tetany. Cats and dogs are very prone, and almost without exception fall certain victims to its influences. Sheep, rabbits, and rats are singularly exempt from its effects. If the gland be removed by halves, the usual symptoms ensue only after the second half is excised. During the interval between the two operations the remaining half hypertrophies. If the thyroid be four-fifths removed, tetany follows. It has been claimed that if one-half of the thyroid, or even a smaller portion, be removed and inserted, with proper and due precautions, into the peritoneal cavity, the implanted section will contract adhesions and grow, and that in such a case, if the remainder of the thyroid be then removed, the usual symptoms of tetany do not appear. This has been explained on the ground of the thyroid's function being taken up by the transplanted portion, a theory which is as yet not proven.

Clinically there occurs a disease which is practically the chronic form of tetany, to-wit, myxedema. The connection between myxedema and thyroid disease or removal, has long been hinted at, though until the recent work on tetany was reported, there was not much experimental ground to base this opinion on. The possible existence of accessory thyroids must not be lost sight of, for otherwise certain experiments may seem to vitiate the connection between tetany and loss of the thyroid, whereas they really do not, because of an additional thyroid which may be present and which assumes the duties of the lost organ. Animals, whose thyroids have been wholly removed, show signs of tetany similar to that in man; they are dull, apathetic, have spasms, dyspnea, etc., and die within a few days.

In apes the disease appears very slowly, if the animals be kept warm and protected from loss of bodily heat.

It is supposed that the thyroid has to do with maintaining the amount of *mucin* in the blood at a proper level. Mucin extracted from normal thyroids is highly poisonous when injected into the circulation; after thyroidectomy there appears to be an excess of mucin in the blood and tissues; in myxedema mucin appears in abnormal quantities in the salivary bladder excretion, intestinal contents, blood, and tissues; myxedema patients often suffer from a profuse bronchial catarrh, in which the secretions contain an unusual amount of mucin, and where this catarrh is checked the general condition of the patient depreciates; from all of these facts it is believed that the thyroid has to do with converting the excess of highly deleterious mucin into some non-poisonous material.

In view of these facts, it is assumed that in goitre, when the thyroid is found in a state of so-called myxoid degeneration, that the proper function of this gland has been lost, and that the organ then acts as a store-house for the excess of mucin.

Tetanus follows particularly after wounds, but it may occur with an unbroken skin. Some wounds are more liable to be followed by tetanus than others, for example, those of a lacerated or contused nature, and gun-shot wounds. The disease may appear early or late after the infliction of an injury.

It is said that cases have been observed as late as one year after the injury, and it may also appear as early as a few days subsequent to the wound. A wound does not need to be open to permit of the tetanus symptoms pronouncing themselves; it is well known that cases occur after thorough cicatrization of the wound.

It is a malady attacking young or old indifferently; males seem more liable to its ravages, probably from greater chances for injury because of greater exposures. Statistics show that the colored races are sufferers to a larger extent than the whites; this is particularly true of the West Indies negroes, who have a high rate of mortality from tetanus, and here the children, newly born, are very commonly attacked (the so-called *trismus nascentium*). It is supposed that the greater filth in which these races live, predisposes to the disease. Climate also seems to act as a predisposing factor, those people of warmer climates showing a larger mortality.

It is a disease characterized by tonic spasms of almost universal distribution as regards the muscles involved, those of the face usually showing the first signs. There is a form, the *tetanus hydrophobicus* of the older writers, where the spasms seem unusually severe in those parts supplied by the facial and other cranial nerves. It occurs in those cases where there is much facial injury. When the disease is well established, there seems to be a more or less constant succession of spasms; a patient may have such an attack, become quiet, and a most trifling irritation, noise, or effort will cause another succession of spasms; even the mere sight of a bright light suffices to accomplish this. In the so-called *tetanus hydrophobicus*, an effort to take a drink will cause a spell of facial contractions to ensue, or tapping on the face may be enough to precipitate the spasm.

Formerly two theories were held to account for this disease: the nervous, whose advocates claimed that it arose through irritation of the nerves involved in the wounded areas; and second, the so-called humoral, where the disease was ascribed to a humor or poison in the blood. It is now positively known that the trouble is of germ origin; a bacillus having been isolated, which fulfills all three postulates necessary to prove a germ's connection with a disease as a causative agent. The bacillus is an *obligate anaerobe*; that is to say, a germ which only grows when all oxygen is excluded, and this is one factor which has prevented its recognition earlier.

There are many peculiarities connected with the bacillus of tetanus. For example, it is never found in any of the tissues of a patient, except in the immediate neighborhood of the wound or injury. It seems to excite a most powerful poison — *ptomaine* — which apparently has the power of propagating itself along the cerebro-spinal nervous tract. Cauterization or excision of the

wound — the focus of infection — does not terminate nor even delay the symptoms. There have been a number of *ptomaines* isolated from the tissues of patients or animals suffering from tetanus, and from cultures of the bacillus, but none of them come up to the extreme virulence of the disease, and the probabilities are that there will yet be another ptomaine isolated, which will be even more deadly than any heretofore discovered.

Dr. Park exhibited a guinea-pig that he had inoculated with a pure culture of the bacillus of tetanus sixty hours previously, the animal displaying characteristic spasms of the muscles of the posterior part of the body. (The guinea-pig lived twelve hours longer, and died displaying universal tetanus.) A cat was also exhibited whose thyroid gland had been completely extirpated five days before; this animal displaying the characteristic tremor and other signs, alluded to by the lecturer, as completely as the length of time elapsing since operation permitted. It also died after a few days of acute tetany.

Progress in Medical Science.

MEDICINE.

CONDUCTED BY

DELANCEY ROCHESTER, M. D.

THE CONDITION OF THE HEART IN ANEMIA, AND THE CAUSE OF THE PULMONARY MURMUR.

HANDFORD (*American Journal of the Medical Sciences*, Vol. C., No. 6, p. 558,) presents an original and most interesting view of the cause of the pulmonary murmur in anemia. He agrees with all other careful observers, that in anemia the heart muscle undergoes some fatty degeneration and the cavities become dilated. He considers that this dilatation is greater on the right side, and gives good reasons for his conclusions. He brings forward the view, which is undoubtedly correct, that "there are several different murmurs in anemia, one or all, or none, of which may be audible in a given case."

He states that "the characteristic of the so-called hemic, pulmonary murmur is that, though audible frequently in all the areas, its point of maximum intensity is in the second or third left

interspace (usually the second), close to the sternum; and that it invariably becomes much less loud, and frequently totally disappears in the erect position." He cites several cases in support of this view.

His theory of the cause of the pulmonary murmur, in support of which this article is written, is that "this pulmonary murmur, disappearing in the erect position, is due to the pressure of an enlarged, flabby, and dilated heart on the pulmonary artery."

It is one of the most interesting papers that has been written, and shows careful observation and deep study of cases.

GASTRO-INTESTINAL DISORDERS AND THE DIET IN PULMONARY PHTHISIS.

KARL VON RUCK (*Therapeutic Gazette*, Vol. XIV., No. 10,) gives the result of some observations on this subject. He brings forward the statement that in many cases of phthisis, the first—and for a long time the only—indication of tubercular trouble is the continuous and obstinate existence of indigestion. This is, of course, an old idea, but the detailed account of the management of cases shows how much can be done for their improvement by a conscientious worker. The ideas thrown out are overfeeding, carefully and scientifically done, the hydrocarbons being considerably in excess, rest in bed with massage for exercise, gastric lavage when indicated, and, in the way of medication, the use of the pneumatic cabinet, and oxygen, together with creosote in rapidly increasing doses, and dilute hydrochloric acid, when that factor is diminished in or absent from the gastric juice.

PHYSIOLOGICAL CHEMISTRY.

CONDUCTED BY

JOHN A. MILLER, M. Sc., Ph. D.

ABSORPTION OF FAT.

O. MINKOWSKI (*Practitioner*, 45, 139. *Jour. Chem. Soc.*, 58, 1171). From an examination of the feces, it was found that after extirpation of the pancreas the fat of the food is no longer absorbed. An exception to this was milk, whose fatty constituents were more or less taken up. By mixing the food with the fresh pancreas of the pig, the greater part of the fat was absorbed. The results lend no

support to the view that the pancreatic juice breaks up fat into fatty acid and glycerine; on the contrary, the fatty matter in the feces was found, for the most part, split up, although the pancreas was entirely absent; this renders the theory that the fat is largely absorbed in the form of soaps untenable. The results show that the action of the juice is not a special one upon the absorbent elements of the intestines, as is evident from the fatty matter of milk being ingested in the absence of the gland, and they also show that what is *important* is the *form* in which the fat comes in contact with the intestinal mucous membrane.

The further observation was made that an action of the pancreas on fatty matters takes place, although there is no direct flow of the pancreatic secretion into the intestinal canal, provided a part of the pancreatic tissue capable of performing its functions remains in the organism. For example, after partial extirpation of the gland, fat absorption, though impaired, was not altogether prevented.

Another extremely interesting fact was also established, that in dogs complete removal of the pancreas leads to *diabetes*; and Hirschfeld has shown that in diabetes patients the absorption of proteid and fat is much impaired. This is, perhaps, an indication that the cause of diabetes in some cases is disease of the pancreas.

DESTRUCTION OF GLUCOSE BY BLOOD AND CHYLE.

R. LEPINE and Barral (*Compt. rend.*, 110, 1314, *Jour. Chem. Soc.*, 58, 1172). Further experiments have been made by the authors, which confirm the existence in the blood, and especially in the chyle, of a ferment which destroys glucose. In cases of acute diabetes this ferment disappears. The activity of the ferment is increased by rise of temperature, but retarded by the presence of carbon dioxide. The experiments were made with dogs. The authors term the ferment the *glycolytic* ferment.

PERNICIOUS ANEMIA.

F. W. MOTT (*Practitioner*, 45, 81, *Jour. Chem. Soc.* 58, 1177). The present case is remarkable as occurring in a young subject (*aet.* eleven years), in the fact that the urine, though loaded with uric acid crystals, was not highly colored, and in the presence of

more iron in the spleen than has been previously noted. The amount of iron found in the various organs was as follows :

Organ.	Wt. in grams.	Total iron as ferric oxide.
Liver.....	900	1.33 grams.
Spleen.....	100	0.17 ..
Pancreas.....	50	0.01 ..
Kidneys.....	100	0.01 ..

In connection with Delépine's work (next abstract) it is suggested that *pernicious anemia is an exaggeration of a normal physiological process*. When the absorption of the products of digestion occurs, the blood is replenished by new materials, and plethora would occur if there were not a proportional destruction of the plasma and corpuscles to form urea and pigments, which leave the body through natural channels. Whether the excessive destruction that occurs in pernicious anemia is due to a poison, the result of bacterial activity, derived from the alimentary canal, must, for the present, be considered unproved, for it does not seem that there is always a relation between the pyrexia, the anemia, and the color of the urine. Moreover, severe putrefactive processes may occur in the intestine without any pernicious anemia being brought about.

It is known that peptone has a very marked influence upon the blood, and it is possible to suppose that this substance, if not reconverted into albumin during absorption, might be the poison in question. The liver and spleen of a dog, into whose circulation peptone solution had been injected, yielded the iron reaction very markedly ; but this may have been accidental, and further experiments are promised on this subject.

NORMAL STORAGE OF IRON IN THE LIVER.

S. Delépine (*Practitioner*, 45, 94. *Jour. Chem. Soc.*, 58, 1177). Pigment is constantly found in the liver cells and in some of the endothelial cells of the intralobular capillaries ; it may be particulate, or diffused through the cell in a state of solution. It gives the reactions of ferric salts, and these are more intense between eight and twelve hours after food has been taken, and reach a minimum immediately after the ingestion of food. The pigment is, as a rule, most abundant in the portal zone. The liver has thus a *ferrogenic* function, which probably consists of a separation of iron from effete iron-containing pigment, a storage of that iron in the

form of a loose compound, and the gradual formation of a more stable albumin-ferruginous compound, analogous, if not identical, with hemoglobin, and ready for assimilation by the young red blood-corpuscles. Pernicious anemia is probably an exaggeration of this normal process.

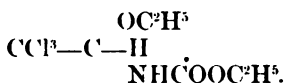
Selections.

NOTES UPON SOMNAL, THE NEW HYPNOTIC.

BY FRANK WOODBURY, A. M., M. D.,

Fellow of the College of Physicians of Philadelphia; Hon. Professor of Clinical Medicine
in the Medico-Chirurgical College, etc.

LAST Fall, Radlauer¹ of Berlin brought to the notice of the medical profession a new compound to which he gave the name of Somnal, in acknowledgment of the remarkable hypnotic properties which it appeared to possess. It was formed by the union of chloral, alcohol and urethane, according to the original notice,² but is not a simple mixture of these bodies. It differs from chloral-urethane by the addition of C²H⁴, its formula being C H¹²Cl³O³N. The method of manufacture is by direct combination of chloral alcoholate and urethane in a vacuum apparatus, according to its discoverer, who states³ that its composition might be graphically represented thus:



Specimens of this new hypnotic having, through the courtesy of Messrs. Eisner & Mendelson Co., been placed in my hands for examination and trial, I will here, very briefly, communicate some of the results thus far obtained, reserving my final judgment upon the drug until experience has been more extended.

Physical Characters.—Somnal is a colorless liquid, resembling chloroform in its appearance and behavior when added to cold water, in which it forms globules and refuses to mix or dissolve. When shaken with water, the mixture is milky but quickly separates. It is soluble in hot water and alcoholic solutions, and dissolves resinous substances and fats. The odor is faint, not very

1. *Zeitschrift des Apothekern-Vereins*, Nov., 1880.

2. *Journal de Médecine*, Oct. 20, 1880.

3. *Pharmaceutical Journal and Transactions*, Nov., 1880.

in. He was thirty-nine years of age, very tremulous, and could not sleep, or if he dozed off would immediately waken up. I gave him, at about 3 P. M., thirty minims of somnal (or rather a drachm of a mixture of equal parts of somnal and whisky), well diluted, and went into an adjoining room to speak to an attendant. Upon my return I was surprised to find him fast asleep, although I had not been away from him more than fifteen minutes. He slept for four hours, and then was able to take something to eat. At ten o'clock he had another dose, and he slept until seven the next morning, having wakened up once only during the night, and insisted upon having another dose, and immediately after taking it he fell asleep again. The next night he was given a double dose at 10 P. M., and he slept all night without wakening. No bad effects were observed. The somnal was given for four nights, when he was so nearly well that it was suspended, as he had had good natural sleep at night and seemed quite restored. Alcohol was positively prohibited, the only substitute allowed being Elixir of Coca and Camellia (P. D. & Co.), in tablespoonful doses, in which it is true there was a small amount of alcohol, which was quite infinitesimal when compared with what he had been using. Somnal, therefore, acts well as a hypnotic in acute alcoholism as a tranquillizer and hypnotic.

In a case of neuralgia of the bowels (visceral neurosis of Allbutt), where the patient had a sleepless night, a dose of twenty minims relieved nausea and pain, and the patient fell asleep.

In syphilitic headache and insomnia, somnal, in moderate doses, failed to produce sleep, which was afterwards secured by potassium bromide and iodide, and antipyrin.

In cases of insomnia, fretfulness, and restlessness in young children, somnal with mint water and syrup offers better results than opiates, and is much safer. The same remark probably applies to the use of somnal in acute pneumonia, but I have not been able to confirm this yet by actual trial.

Without further going into detail it may be stated in conclusion that somnal acts as a hypnotic, but instead of depressing the system as chloral does, it slightly stimulates the gastric mucous membrane, relieves nausea and pain, improves the appetite, increases secretion (probably), does not cause constipation. The circulation, respiration, and temperature are not notably depressed after its administration. No disagreeable after-effects have been observed. As it is rapidly eliminated from the body, it may be administered each night for a number of days without any obvious ill effects. It acts very

much like chloral, but is more pleasant to take, and not so depressing in its effects upon the nervous system and the circulation.—*The Dietetic Gazette*.

Therapeutic Notes and Miscellany.

THE FIRST THERAPEUTIC MEASURES IN APOPLEXY.—The treatment of apoplexy is apparently so self-evident, and has for decades remained unchanged, that at first it seems preposterous to make any changes or alteration whatever.

Doubtless the experience of H. has often occurred to many physicians in their regular practice. The doctor is called to see a case of extensive apoplexy, and elicits this history: The patient has suffered a light attack of paralysis; he complains of vertigo and a sensation of weight and immobility in both the upper and lower extremities; there is distortion of the facial muscles, and speech is impaired. The patient has been undressed and placed upon a bed; scarcely has this been done, when a second, more profound attack occurs.

This and similar scenes constantly recur in practice; invariably the profound attack occurs shortly after the patient has been placed upon the bed in the horizontal position. This is done again and again, despite the fact that this position conduces to the cerebral hemorrhage, defeats the very object which it is desired to accomplish, *i. e.*, prevention of recurrent profuse hemorrhage.

After these experiences, it is absolutely necessary that after the first, the mild attack of cerebral hemorrhage, the patient shall be maintained in the sitting-erect position for a long time; so long, in fact, as the patient's condition will permit. Meanwhile, ice to the head, hot mustard foot-baths, rapidly acting hydragogue cathartics; and in selected cases, leeches, will be the prophylactic measures which in conjunction with position, as above described, will often prevent a second attack. — *Dr. Heidenhain, Berlin Klin. Wochen.*

When urine contains an unusual percentage of carbonic acid gas, it effervesces on the addition of nitric acid. This effervescence often occurs in the case of persons undergoing a course of aerated mineral waters, or habitual indulgers in the products of the soda fountain.

PILOCARPINE IN DRYNESS OF THE TONGUE.—Extreme dryness of the tongue is, under any circumstances, a very distressing symptom, and one which does not readily yield to treatment whilst the concomitant cause remains in operation. The sucking of ice or sipping of bland fluids gives but temporary and inadequate relief, and the same may be said of glycerine employed as a paint. In this condition I have successfully used pilocarpine, grain 1-20th or grain 1-10th, in the form of a gelatine lamel, allowed to dissolve on the tongue, previously moistened with a sip of water. I find this small dose quickly establishes a moderate flow of saliva, which persists for at least twenty-four hours, and is unaccompanied by excessive perspiration. The altered state of the mouth is often described by the patient as being delightful. I send this with the hope that others may share the satisfaction I have experienced, if they have not already done so, in this use of pilocarpine. It is scarcely necessary to add that we must exercise due caution in the use of so potent a remedy.—J. G. BLACKMAN, M. D., *Brit. Med. Journal*.

As ARISTOL is now claiming the attention of the medical world, we publish some of its modes of administration, taken from *The Bulletin Général de Thérapeutique*.

1.—ETHEREAL SOLUTION :

Aristol ½ ounce.
Ether 5 ounces.

2.—WITH COLLODION :

Aristol 1 part.
Collodion 9 parts.

3.—OINTMENT :

Aristol 1 part.
Olive oil 20 parts.
Lanoline 70 parts.

4.—SUPPOSITORY :

Aristol 16 grains.
Cocoa butter q. s.
One suppository

URINE is ammoniacal in many bladder diseases, in grave cases of typhus, in affections of the spinal cord, and in the second stage of acute exudations.

PREPARATIONS OF DIGITALIS.—Continental physicians have recently been discussing the efficacy of preparations of digitalis, and one of them focused the general ideas when he said that he preferred the cold infusion on account of its supposed greater diuretic activity. It is prepared by taking from 0.25 to 0.40 gramme of powdered digitalis leaves and adding 300 grammes of cold water. This should be allowed to macerate for twelve hours, and then filtered. It may be sweetened with syrup. When it is desired to obtain a powerful diuretic action, it is preferable to administer this quantity in two or three doses. There is nothing very new about this, but it is well to print it as a reminder that preparations of digitalis containing alcohol are often inert.

IF a sound, bougie, or catheter is arrested at *less* than six inches from the meatus, the obstruction is caused by a stricture, in all probability; if it is not stopped until it has passed *more* than six inches, the blame is due to enlarged prostate. Stricture never exists here, but is frequently found at the juncture of the membranous portion with the bulb. Yet the prostate may be enlarged *without* causing any hindrance to the passage of an instrument, especially when the enlargement only involves the third lobe, or when the employed instrument is of sufficient length and suitable curve.

In treating strictures, there is never any necessity to pass the instrument further than nine inches from the point: this can conveniently be marked on the bougie, and will show that the bladder has been entered. Mischief may be done by forcing it onward against the lining mucous membrane, while no object is served.—*Medical World*.

GUM-LANCING IN CHILDREN.—Dr. Forchheimer says of gum-lancing:

1. It is useless (*a*) as far as giving relief to symptoms; (*b*) as far as facilitating or hastening teeth.
2. It is useful only as blood-letting, and ought not to be used as such.
3. It is harmful (*a*) in producing local trouble; (*b*) in producing general disturbance on account of hemorrhage; (*c*) in having established a method which is too general to do specific good, and too specific for universal use.
4. It is to be used only as a surgical procedure to give relief to surgical accidents.

BUFFALO MEDICAL AND SURGICAL JOURNAL

A MONTHLY REVIEW OF MEDICINE AND SURGERY.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed to the editors :
284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXX.

JANUARY, 1891.

No. 6.

Editorial.

THE HEATING OF STREET CARS.

WE HAVE heretofore called attention to the desirability of warming the street cars, and have presented some of the reasons that, in our opinion, prove the advantage of so doing over the present system. It is not necessary to repeat what has been said upon former occasions, but we recur to the subject now in order to call attention to a recent editorial in *The Buffalo Courier* which expresses so well the proper position to take on this matter, that we print it entire.

It is not often that hygienic questions are discussed by the lay press without betraying the ignorance of the writer; and an important step is taken in the diffusion of knowledge when we find such correct conclusions given the wide publicity of an editorial in a leading daily as the following :

Recent remarks of *The Courier* on the heating of street cars have drawn comments from esteemed contemporaries of Rochester, a city whose cars are heated. The *Rochester Herald* approves the heating, while the *Rochester Union* disapproves. The *Union* says that "usually the air in the heated cars is vile." If by this it is meant to say that heating the air fouls it, the comment is not sound. Cold air, as well as warm, may be foul. In fact, in an unheated car, the tendency to keep the ventilators closed and breathe the air over and over, is stronger than in a heated car. It is this rebreathing, and not the heat, that vitiates the air. So far as the heat affects the air, its tendency is to create currents and promote an interchange of the air inside with that outside — and this is ventilation. The *Herald* says :

All who have traveled some distance in the street cars in this city before the heaters were introduced, know not only that they suffered much discomfort, but frequently contracted colds by leaving the warm rooms of their homes and offices and sitting for from ten to twenty-five minutes in a car, the temperature of which was often far below the freezing point.

This has been the case in Buffalo. Those who have ridden short distances probably have not suffered much from this cause, but several of the Buffalo riders are at home now, and that is time enough to get dangerously chilled in a hot day.

One neglected the common-sense says: "There is not a more reliable disease-breeder than the atmosphere of a heated street car." Here again we have the mistake of assuming that hot air is necessarily less pure than cool air. This is entirely erroneous. The purity of the air and its temperature are quite distinct matters.

The point is that in relation to this subject as to most, there is a golden mean. A car heated too much and a car not heated at all are equally disastrous to comfort and dangerous to health. The subject is one of considerable moment here just now. The general manager of the Buffalo street car lines has stated that the cars are to be heated and heated with stoves. But Winter is upon us, and no cars are yet heated. That a popular demand for heated cars has long existed here cannot be questioned. As the number of passengers increases, the interest in the subject likewise increases. As the heaters have evidently not yet been provided, which is the cause for all their harm and character may be strengthened without hurting one of the victims, in the interest of the thousands of people whose comfort and perhaps health is involved, to urge the managers to be cautious about going from one extreme to the other. If the cars are to be heated without being *heated*, a good thing will be accomplished. It is a matter to which much attention has been paid and for which many devices have been contrived. Some care and pains in examining them and securing the best will be well expended.

UNIVERSITY OF THE STATE OF NEW YORK — EXAMINATIONS DEPARTMENT.

We publish the following instructions from the State Board of Regents for the information of all concerned:

Endorsement of Medical Diplomas and Licenses Under the Laws of N. Y., 1887, Chap. 677, as Amended by the Laws of N. Y., 1890, Chap. 576.

CANDIDATES for endorsed diplomas or licenses should send to

Examinations Department, U. S., N. Y.: Albany, N. Y.: the affidavit, questions, and certificates of moral character on the enclosed forms; credentials of preliminary education; the local fee of ten dollars, and the medical diploma or license on which the endorsement is asked. The certificates of moral character should be from physicians legally authorized to practice medicine. The credentials of preliminary education should show that the candidate has passed the required Regents' examinations; or, if equivalents are offered, they should not cover less than one full year in a college, or three years in an institution of academic grade. The medical credentials will be presented for consideration to the State Board of Medical Examiners, selected by the candidate, and results will be returned as soon as possible.

RALPH W. THOMAS,

Chief Examiner.

Albany, N. Y., 189

UNIVERSITY OF THE STATE OF NEW YORK — EXAMINATIONS
DEPARTMENT.

This certifies that I have been personally acquainted with Dr. for years; that I know him to be of good moral character, and entirely worthy of confidence; and I hereby recommend him to the Regents of the University as entirely worthy to be licensed to practice medicine in the State of New York, pursuant to Chap. 647, Laws of N. Y., 1887, as amended by Chap. 500, Laws of N. Y., 1890.

.....
Graduate of

In the year

Present residence

QUESTIONS AND AFFIDAVIT.

1. What was your age when you began the study of medicine?
2. How many years have you spent in medical study with a preceptor?
3. How many regular courses of medical lectures have you attended, and at what medical institution or institutions?
4. Of what incorporated medical school or college are you a graduate; or, in what state or country did you receive a license to practice medicine?
5. Did this diploma or license entitle you to practice medicine in the state or country in which it was conferred?
6. Are you the identical person named in such credential?

7. Are you subject to any of the disqualifications for the study of medicine laid down in Laws of N. Y., 1887, Chap. 647, Sec. 6?

8. Have you ever practiced medicine? If so, where, and how long?

9. To what post-office address do you wish the endorsed credential sent?

Sign your name here

STATE OF NEW YORK }
COUNTY OF } ss.

....., being duly sworn, says that h.. name is; that was born in, on the day of, in the year; that now resides at No. Street, in the City of; and intends to practice medicine in the County of; that has written the answers to the questions hereto attached as such answers now appear, and that the facts set forth in such answers are true. And affiant further says that before receiving said, upon which desires an endorsement, fully and substantially complied with the requisites as to attendance, terms and amount of study and examinations required by the laws of the State and the charter and regulations of said, as preliminary and necessary to the conferment thereof. Affiant further says that no money was paid by for said, except the regular fees paid by all applicants therefor; that no fraud, misrepresentation, or mistake in any material regard was employed by any one, or occurred in order that said should be conferred on affiant.

Sworn to before me }
this ... day of, 189 }
.....

THE ERIE COUNTY EYE, EAR, AND THROAT INFIRMARY.—There have been some recent changes in the attending staff of this institution. Dr. F. Whitehill Hinkel has resigned, and Dr. Frank H. Potter has been appointed Surgeon-in-charge of the Nose and Throat Department. Dr. Hinkel retains his membership upon the Board of Trustees, and it is expected that in the near future he will resume a position upon the active staff. This Infirmary, as its name indicates, limits its treatment to patients suffering from diseases of

the eye, ear, nose, and throat. It is centrally located, at the corner of Huron and Main streets, and is open daily for the reception of patients. Its records show that during the last six months it has treated over four hundred patients. The profession generally, not only of the city, but of the county—in the surrounding towns, and in the country districts—may be assured that worthy patients, unable to pay for medical services, and requiring treatment in the various departments represented in this Infirmary, will receive careful and conscientious attention.

THE UNIVERSITY MEDICAL MAGAZINE announces that, with the beginning of the New Year, it will add a new department to its columns devoted to Medical Progress. It will be divided into five sections, each under charge of special editors, as follows: Medicine, conducted by William Pepper, M. D., and James Tyson, M. D.; Surgery, by D. Hayes Agnew, M. D., and J. William White, M. D.; Therapeutics, by Horatio C. Wood, M. D.; Gynecology, by William Goodell, M. D.; Obstetrics, by Barton Cooke Hirst, M. D. The advantages of this plan are obvious, and are such as every progressive medical magazine must adopt. The *University* expects to make this one of the most attractive features of this already very attractive periodical, and will increase its size by the addition of sixteen to twenty-four pages, to make room for the new feature. It will, however, not advance its subscription price on that account. We congratulate the management of this excellent journal on its success already achieved, and bespeak for it a brilliant future.

WE DEVOTE considerable space in this issue to two letters of Professor Reise, of Copenhagen, (kindly translated for us by Dr. Mynter,) giving his observations of Koch's recent methods of treating tuberculosis. It is by far the best exposition of the subject that we have yet seen, and we trust our readers will be interested in its perusal. We shall present the valuable points on this subject from time to time as they are evolved, but shall avoid filling the JOURNAL with unreliable data. The general status, as expressed in our leader in December, is still unchanged.

THE DISTRICT MEDICAL SOCIETY of the County of Hudson, N. J., has adopted a set of preambles and resolutions calling upon the Legislature to pass a bill to be introduced by the New Jersey State Board of Medical Examiners, repealing the charter of the "Medical and Surgical College of the State of New Jersey," for

alleged irregular practices in methods of teaching and issuing diplomas.

Personal.

COLONEL CHARLES SUTHERLAND, Surgeon U. S. Army, has been appointed Surgeon-General, with the rank of Brigadier-General, vice Jedediah H. Baxter, deceased. General Sutherland entered the military service August 5, 1852, as Assistant Surgeon, having been appointed from Pennsylvania. He has been in continuous service ever since, and brings to his new position as Surgeon-General a rare equipment in experience and personal fitness.

DR. CARL WEIDNER, of Louisville, Demonstrator of Bacteriology in the Kentucky School of Medicine, has been sent to Berlin by Dr. J. B. Marvin, Professor of Practice in the same school. Dr. Weidner is Dr. Marvin's assistant, a successful practitioner, and an expert microscopist. He goes to Berlin to investigate practically the Koch method of the treatment of tuberculosis, and will remain some time.

DR. L. BRADLEY DORR has been appointed Assistant in Chemistry at the Medical Department of the Niagara University. Dr. Dorr has enjoyed the excellent training offered by the Johns Hopkins University. The Niagara University is fortunate in securing so able a man to fill the place left vacant by Mr. Jessel's resignation.

DR. J. C. SEXTON, of Rushville, Ind., is the author of some very bright and sensible sayings in his presidential address before the Union District Medical Society, at Connersville, October 23, 1890, and which is published in the December number of the *Indiana Medical Journal*.

DR. T. HAVEN ROSS announces to the profession that he has made a special study of Orthopedic Surgery for several years, and that he has opened a down-town office (temporarily) at 360 Main street, Room 8, for the practice of that specialty.

DR. GUSTAV A. POHL has removed to 96 Lemon street, above Virginia street, Buffalo, N. Y. Office hours: 8.30 A. M., 1 and 7 P. M. Sundays, 9 A. M.

Obituary.

SURGEON GENERAL BAXTER, U. S. ARMY.—The ink on General Baxter's new Commission had scarcely dried, when the startling intelligence was sent out that he had been stricken with paralysis; and the attack proved fatal December 4th, 1890, with a return to partial consciousness only, and that of few moments' duration, from the inception to the ending of the disease.

Dr. Jedediah H. Baxter was a native of Vermont, and was fifty-three years of age at the time of his death. He was educated at the University of Vermont, where he took both the Academic and Medical degrees, and later the law degree of the Law School of Columbia University.

He was admitted to the bar of the Supreme Court, though his chosen profession was medicine, not law, and the breaking out of the war found him engaged in the practice of the former in the State of Massachusetts.

Dr. Baxter entered the military service in 1861, as Surgeon of Col. Fletcher Webster's 12th Massachusetts Regiment; in April, 1862, was appointed Surgeon United States Volunteers (Staff Surgeon); in 1864 was detailed for duty in the War Department as Chief Medical Officer of the Provost-Marshal General's Bureau; and in these several positions he acquitted himself with distinction. He saw service in the field with the Army of the Potomac, and had charge of a United States General Hospital in Washington, besides the experience of a Bureau Office in the War Department, all of which peculiarly well equipped him for his last and highest office. But he also held the posts of Assistant and Chief Medical Purveyor of United States Army, from the close of the war to the date of his promotion, August 16, 1890, where he further added to and developed his administrative talents. Under General Baxter's administration the Surgeon General's Department promised an able and progressive future.

His funeral was held from All Saints' Unitarian Church, December 6, 1890, and his remains found rest in that appropriate spot, Arlington Cemetery. The escort pertaining to his rank of Brigadier General, viz., five battalions of infantry, a platoon of artillery, and two troops of cavalry, served at the funeral, and the War Department closed at noon on the day thereof as a mark of respect.

DR. SIDNEY ALLAN FOX died of pneumonia at his home in Brooklyn, December 11, 1890, aged thirty-three years. He was a specialist in diseases of the nose, throat and lungs, in which department of medicine he was fast making a name. He was a delegate to the Berlin Medical Congress from the Medical Society of the State of New York. He married the daughter of Hon. William J. Coombs, and she is now herself ill with pneumonia.

DR. JAMES L. STEWART, of Erie, Pa., died in that city December 6, 1890, aged sixty-six years. Dr Stewart served as a Surgeon of Pennsylvania Volunteers during the war, and afterward achieved considerable local renown as a surgeon. He had but lately returned from the Berlin Medical Congress, when his fatal illness seized him. He had held office in the several local, State and National Medical Societies, and was a conspicuous figure in the medical and social circles of his city.

DR. WILLIAM H. McREYNOLDS, of Cincinnati, O., died at his home, November 29, 1890, after a long illness, consecutive to *la grippe* of last Winter. Dr. McReynolds was Surgeon of the 2d Regent Ohio Cavalry during the war, and has been engaged since its close in the active practice of his profession. He was much respected by his professional friends and neighbors in the city of his home, and leaves a widow and three lovely young daughters in bereavement.

Society Meetings.

SEVENTH INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY.

Editors Buffalo Medical and Surgical Journal:

I AM requested by the Honorary Secretaries of the Committee of Organization of the Seventh International Congress of Hygiene and Demography, to call attention to the fact that this Congress will be held in London during the week beginning August 10, 1891.

The Governments of all countries and municipalities, and all public health authorities, universities, colleges, and societies occupied in the study of the sciences, more or less immediately connected with hygiene, are invited to coöperate and appoint delegates to

represent them at the Congress. The Prince of Wales will preside.

A Committee of Organization has been formed, of which Sir Douglas Galton is chairman, and Professor W. H. Corfield and Mr. Shirley F. Murphy are honorary secretaries. An exhibition of articles of hygienic interest will be held in connection with the Congress. The last of these Congresses was held in Vienna in 1887, and was attended by over 2,000 persons, and it is expected that the London meeting will be one of great magnitude and importance.

Very respectfully,

JOHN S. BILLINGS, M. D.,

Member of the International Permanent Committee.

WASHINGTON, D. C., October 27, 1890.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The officers of this Society are actively at work preparing for the next annual meeting, which will be held in Albany on Tuesday, Wednesday, and Thursday, February 3, 4, and 5, 1891. The indications are that this will be a most interesting and profitable meeting from a scientific standpoint, as a number of papers of more than ordinary interest have already been offered. The conspicuous prominence that the Society holds with reference to reform in medical education, and the important action to be taken with regard to the State Board of Medical Examiners, will, undoubtedly, insure a large attendance. The county societies should look to it that they are represented with a full quota of delegates.

THE MEDICAL UNION held its regular monthly meeting at The Genesee on Tuesday evening, December 16, 1890. The paper of the evening was presented by E. C. Waldruff. Subject: Electrol-ysis in Urethral Strictures. After the regular business of the evening, the annual election of officers took place, resulting as follows: President, Samuel G. Dorr; vice-president, W. C. Phelps; secretary-treasurer, DeWitt C. Greene.

Journalistic Notes.

THE BACTERIOLOGICAL WORLD is a new product of the commencing year, and will issue 5,000 copies this month. The first number will contain the following articles: Frontispiece, Pasteur's and Koch's

pictures ; Study of Bacteriology, preface, introduction, etc.; Lesson First, Generalities on Germs, Spontaneous Generation ; Original articles, Actinomycosis in Man and Beast (big jaw of cattle.) Foreign and home investigations ; Surgical Bacteriology, Bacterial Complication of Wounds (Ogston, Rosenbach, Cornil, Babès, etc.); Medical Bacteriology, Immunity, by Dr. Bouchard, Paris, France; Hygienic Bacteriology, Hydrophobia, by Dr. Paul Gibier, Pasteur's Institute. New York City ; True and Spurious Bovine Vaccination and Complications, by Paul Evans, Pathological Laboratory, Missouri Agricultural Experiment Station; Clinical Notes, Pambotano in Malaria (a specific substitute for quinine), Tarro-Petrolene (or petrolene compound), Pyoktanine ; Editorial, Koch's Treatment of Tuberculosis ; Notes from Laboratories, Pasteur's laboratory and others. It is edited by Paul Paquin, M. D., Columbia, Mo.

Book Reviews.

EPILEPSY : Its Pathology and Treatment. Being the Essay to which was awarded a prize of 4,000 francs by the Académie Royale de Médecine de Belgique, December 31. 1889. By **HOBART AMORY HARE, M. D., B. Sc.**, Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania ; Physician to St. Agnes' Hospital, and to the Children's Dispensary of the Children's Hospital, etc. No. 7 in the Physician's and Student's Ready Reference Series. Philadelphia and London : p. 25. Cloth. \$1.25. F. A. Davis. 1890.

That this is the Belgian Prize Essay, gives a peculiar interest in reading this monograph.

As a complete work it leaves nothing to be desired. The different types of Epilepsy are all carefully considered, and the arguments of different observers on mooted points are carefully weighed and judged.

We must confess that we looked to the section on prognosis in hopes that we might feel justified in taking brighter views of this disease.

In answer to the question, Will there be any progress toward an improvement ? the author says :

Unfortunately, the reply ought not, in any case of the idiopathic form, to be favorable, even for ultimate improvement, for the experience in the past of every large practitioner has been that cures rarely occur. . . . Too much encouragement should not be held out in

he use of drugs ; but this should not be impressed upon the patient's mind, since it is come to render him careless in taking the remedies prescribed.

Of syphilitic epilepsy he says :

In regard to this form, it may be asserted, with no fear of contradiction, that it can, in the majority of cases, be cured, and in nearly all cases improved.

Under the head of treatment we find that he places bromide of potassium at the head of the list, and calls it the most useful drug in use today.

Of antifebrin he says : " It stands in the foremost rank, and bids fair in some instances to rival the bromides." He uses eight grains three times daily. The other drugs used in this disease are mentioned and their merits discussed.

Of Féré's method of applying the cautery to the scalp in cases of epilepsy with hemiplegia, we were surprised to find no mention, as good results have been obtained by him.

We can heartily recommend this book to those who wish to make a thorough study of this disease.

J. W. P.

MEDICAL DIAGNOSIS, WITH SPECIAL REFERENCE TO PRACTICAL MEDICINE. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DaCOSTA, M. D., LL. D., Professor of Practice of Medicine and Clinical Medicine at the Jefferson Medical College, Philadelphia ; Physician to the Pennsylvania Hospital ; Consulting Physician to the Children's Hospital, etc., etc. Illustrated with engravings on wood. Seventh edition, revised. 8vo ; pp. 995. Philadelphia : J. B. Lippincott Company. London : 10 Henrietta street, Covent Garden. 1890. Price, cloth, \$6.00.

The first edition of DaCosta's Medical Diagnosis appeared in 1864, since which time it has been considered a text-book on the subject of which it treats, having been adopted by all the medical colleges worthy the name in this country. Indeed, it may be said that the treatise is as near a classic as any contemporaneous medical literature ever can be, since no physician can afford to be without it, and every teacher *must* possess it.

The progress in medicine in the past twenty-six years has been great, and methods of diagnosis have been ever changing, but "DaCosta," from the first date of its issue, has held its place during all this period as an able and trustworthy exponent of all that was known or worth possessing in the field it seeks to cover.

We cannot undertake to review a book that is so familiar to our readers ; it would be next to an insult to their intelligence to

expect them to read it if we should; but we could not easily forgive ourselves for not expressing an opinion of the great work our distinguished countryman, the author, has done for his fellow-physicians, and through them for humanity, in so industriously pursuing his important field of instruction.

Dr. Dacosta is a graphic writer, and uses English in its purest idiom; his style is direct, expressive, polished, and attractive; but it is never proud, and seldom fails to convey the author's meaning in the fewest words, consistent with clearness. He rarely expresses himself in epigrams, yet his sentences are not involved, and are often rounded in the most agreeable manner.

This seventh edition of his book must necessarily command a large sale, as the additions to the subject are many since the previous one, and it is almost an effort to read a back number in a department of medicine that follows anatomy and physiology so closely as to be almost of the same importance.

The publishers have presented the book, as is their wont, in a most attractive dress.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. LEWIS SMITH, M.D., Clinician, Professor of Diseases of Children, Boston Hospital, Marine Hospital, Professor to Charity Hospital, etc., etc. Second edition, thoroughly revised, with fifty-one illustrations. Philadelphia: Lea and Needhams, A.C., 1890.

It is unnecessary to make an extended review of a book so well known and long so commended as this, but it is a pleasure to announce a new edition of it. In every department it shows that it has been thoroughly revised, and that every advantage has been taken of modern medical knowledge in bringing it completely up to date. The subjects included is the general hygienic care of the child, diseases of infancy and puberty, and the chapters on diathetic diseases are especially a careful study.

It will be one of every recent graduate, before he begins practice, to consult the chapters on scarlet fever and take especial note of the directions as to the proper method of isolation and disinfection.

What makes this work of Dr. Smith of especial value to young practitioners is the attention paid to diagnosis and the careful notes on prognosis.

It is, without question, one of the best of treatises on children's diseases, and is a text-book for students and guide for young practitioners. D&L. R.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of Original Treatises and Reproductions in English of Books and Monographs selected from the latest literature of foreign countries, with illustrations, etc. Volume VIII. Number 1, October, 1890. Number 2, November, 1890. Number 3, December, 1890. Published monthly. New York: William Wood & Company, 56 and 58 Lafayette place. 1890. Price, \$10.00 a year; single copies, \$1.00.

The first number in Volume VIII. of this noted series of monographs, issued in October, 1890, contains the following interesting papers: Suppuration and Septic Diseases, by W. Watson Cheyne, M. B.; Pharmacopeia for Diseases of the Skin, by James Starlin; The Nasal Neuroses, by Granville Macdonald, M. D.; Artificial Respiration, by Benj. W. Richardson, M. D.; The New-Born Infant: its Physiology, Hygiene, and Nourishment, by Dr. A. Auvard; The Urine in Neurotic Diseases, by Dr. Alexander Peyer.

The second number, November, 1890, contains: The Treatment of Uterine Affections by Massage, by Dr. Eugene Arendt; Cosmetics — A Treatise for Physicians, by Dr. Heinrich Paschkis; Affections of the Stomach in Diseases of the Male Organs of Generation, by Dr. Alexander Peyer.

The third number, December, 1890, has the following articles: Practical Guide to the Demonstration of Bacteria in Animal Tissues, by Dr. H. Kühne; On the Present Position of Antiseptic Surgery, by Sir Joseph Lister, Bart.; Cancer and its Complications, by Charles Edgerton Jennings, F. R. C. S., M. B.; The Treatment of Epilepsy, by Dr. Ch. Féré; Hand-book to Dr. Koch's Treatment in Tubercular Disease, by Drs. Grün and Severn. An index in this number completes the volume; and the second year of this series is even greater than the first.

SAUNDERS' QUESTION COMPENDS. No. 15. Essentials of the Diseases of Children; arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By WM. POWELL, M. D., Physician to the Clinic for Diseases of Children in the Hospital of the University of Pennsylvania, etc., etc. Philadelphia: W. B. Saunders. 1890.

This book, like all of its kind, has no proper excuse for its existence. The license to practise medicine should be granted only to those thoroughly qualified to obtain it, and all aids to obtain a medical degree without thorough information, in all branches of medical science, should be frowned down by all who are interested in a deeper, broader education, and a higher standard of educational qualification in the degree of doctor of medicine. It

is a pity to see instructors in medical schools countenancing such books, for the only purpose they serve is to aid a student to "cram" for examination. The superficial knowledge gained in this way is, of necessity, not lasting: and in medicine, more truly than in any other branch of science, "a little learning is a dangerous thing."

The book before us is neither better nor worse than others of the same class. The binding and letter-press are good. DEL. R.

CYCLOPEDIA OF THE DISEASES OF CHILDREN. MEDICAL AND SURGICAL. The articles written especially for the work by American, British and Canadian authors. Edited by JOHN M. KEATING, M. D. Vol. IV., illustrated. Philadelphia: J. B. Lippincott Company. 1890.

The fourth volume of this magnificent work is on a par with the preceding volumes, in the excellence of its articles. The subjects treated of are the Eye, the Ear, General Hygiene, and Diseases of the Nervous System. The whole volume is profusely and beautifully illustrated. The articles on hygiene include physical development, massage, prophylaxis of disease in children, school-hygiene, construction of children's hospitals, juvenile crime and public methods of prevention and reclamation, and medico-legal testimony. The first and fourth of these are especially worthy of commendation. The diseases of the nervous system are fully and satisfactorily treated of in a series of elaborate articles by observers who have made a special study of such cases. Especially worthy of note is the article on Diagnosis of Nervous Diseases by Allan McLane Hamilton. The letter-press is in every way most satisfactory.

DEL. R.

THE PHYSICIAN'S ALL-REQUISITE TIME AND LABOR-SAVING ACCOUNT-BOOK. Designed by WILLIAM A. SIEBERT, M. D., Easton, Pa. Philadelphia and London: F. A. Davis, publisher.

Many books of this nature have been offered to the profession of late, but each one has some defect that prevents its universal adoption. After a careful examination of the one before us, we are quite of the opinion that it is one of the best, and comes nearer to the ideal than any book designed for a similar purpose that we have seen. This book has a great advantage in that it will last many years, its space is so condensed and utilized. It is issued in two sizes — 300 pages contain spaces for 900 accounts, price, \$5; and 600 pages provide for 1,800 accounts; price, \$8. The book must be examined to be appreciated, and is almost sure to command a purchaser wherever presented for inspection.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. Compiled by JOHN S. BILLINGS, M. D., Surgeon U. S. Army. Authors and Subjects. Volume XI. Phædronus-Régent. Washington: Government Printing Office. 1890.

The present, or eleventh volume, of this remarkable work contains: Author-titles, 9,539, representing 4,535 volumes, and 8,908 pamphlets. It also contains 14,262 subject-titles of separate books and pamphlets, and 38,080 titles of articles in periodicals.

Year by year this stupendous labor goes on, and when completed will form the most comprehensive and useful reference catalogue the world has produced. Too much credit cannot be accorded to the compiler.

THE PATIENT'S RECORD. For the use of Physicians and Nurses. Compiled by AGNES S. BRENNAN. Quarto, pp. 100. G. P. Putnam's Sons, New York and London. The Knickerbocker Press. 1890.

This record has rulings for date, time, temperature, pulse, respiration, medicine, nourishment, stimulants, and remarks. It also has interleaved slips for entering the "doctor's orders." At the end of the book, bound in, but with perforated pages, are a number of temperature charts, with rulings for pulse, respiration, and urine in twenty-four hours, that serve a convenient purpose. It furnishes a neat way of preserving daily clinical histories, and will be found very useful in hospitals and clinics.

BACTERIOLOGICAL TECHNOLOGY FOR PHYSICIANS, By DR. T. C. SALOMONSEN. Translated by William Trellase. Pp. 162; 8vo. New York: William Wood & Co. 1890.

The second edition of this well-known work has undergone some modifications and additions, greatly adding to its worth and completeness. In nearly all the chapters there has been a reëlaboration to keep it in the front of bacteriological investigations, which is making such rapid strides at the present day. For the inquiring physician this little work answers every purpose, and will enable him to read intelligently upon this important subject as well as make original researches.

W. C. K.

THE MEDICAL BULLETIN VISITING LIST, OR PHYSICIAN'S CALL RECORD. Arranged upon an Original and Convenient Monthly and Weekly Plan for the Daily Recording of Professional Visits. F. A. Davis, Medical Publisher and Bookseller. 1231 Filbert street, Philadelphia, Pa.

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THE PHYSICIAN'S VISITING LIST. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St.

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BOOKS AND PAMPHLETS RECEIVED.

Transactions of the American Dermatological Association at its Fourteenth Meeting, held at Richfield Springs, N. Y., September 2, 3, and 4, 1890. Official report of the proceedings. By George Thomas Jackson, Secretary. New York. 1890.

Modern Treatment of Headaches. By Allan McLane Hamilton. M. D. The Physician's Leisure Library. No. 6, second edition. Detroit: George S. Davis. 1890. Price, cloth, 50c. ; paper, 25c.

The Teaching and History of Mathematics in the United States. By Florian Cajori, M. S., (University of Wisconsin), formerly Professor of Applied Mathematics in the Tulane University of Louisiana, now Professor of Physics in Colorado College. Bureau of Education. Circular of Information No. 3. 1890. 8vo; pp. 400; paper. Washington: Government Printing Office. 1890.

Report of the Surgeon-General of the Army to the Secretary of War, for the fiscal year ending June 30, 1890. Washington: Government Printing Office. 1890.

Annual Report of the Treasurer of the United States. 1890. Washington: Government Printing Office.

Report of the Proceedings of the Fifteenth Annual Meeting of the Alumnae Association of the Woman's Medical College of Pennsylvania, March 14, 1890. Philadelphia: Penfold Brothers. 1890.

Report for the Year 1889-90, presented by the Board of Managers of the Observatory of Yale University to the President and Fellows.

Treatment of Catarrh. By J. J. Stephens. M. D., Clinton, Mo. Reprint: St. Louis *Courier of Medicine*, September, 1890.

Remarks on the Albuminate of Iron. By John A. Ouchterlony. A. M., M. D., Professor of the Principles and Practice of Medicine and Clinical Medicine, Medical Department University of Louisville. Reprint: *American Practitioner and News*. 1890.

The Relation of Bacteria to Practical Surgery. The Address in Surgery delivered before the Medical Society of the State of Pennsylvania. June 4, 1890. By John B. Roberts, A. M., M. D., Professor of Surgery in the Woman's Medical College, and in the Philadelphia Polyclinic. Philadelphia: William J. Dornan. 1890.

Quinine as a Prophylactic or Preventive against Malarial Fevers. New York: C. F. Bockringer and Seehne. 1890.

University Medical Magazine Bulletin, December, 1890, containing: I. Dosage, Method of Injection, and Symptoms Produced by Subcutaneous Injections of the Lymph, as stated in Koch's paper. II. Specific Directions Accompanying the Lymph. III. Clinical Results of the Treatment of Tuberculosis by Koch's Method. IV. Methods of Investigation to be Pursued at the University Hospital. V. Berlin Correspondence.

Rupture of an Ectopic-Sac in the Sixth Month of Pregnancy. Abdominal Section and Recovery. By Drs. James Moran and Thomas H. Manley. New York: E. P. Coby & Co. 1890.

Two Cases of Fractured Skull. Recovery in one; death from chloroform in the other. By Thomas H. Manley, M. D., Visiting Surgeon to the Harlem Hospital, New York. Reprint: *The Medical News*, October 4, 1890.

Early Operation for Hare-Lip, with the Report of a Case. Illustrations, etc. By Thomas H. Manley, A. M., M. D. Reprint: *The Medical Age*, September 25, 1890.

Ueber die Ergebnisse der Totalexstirpation des Carcinomatösen Uterus. Von Professor Dr. Leopold und Dr. Münchmeyer in Dresden. Separatabdruck aus der *Münchener Medic. Wochenschrift*, Nr. 46. München, 1890. Druck der Akademischen Buchdruckerei von F. Straub.

Some Recent Cases in Pelvic and Abdominal Surgery. By L. S. McMurtry, M. D., of Louisville, Ky., Gynecologist to Sts. Mary and Elizabeth Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the Edinburgh Obstetrical Society, etc. Read before the Kentucky State Medical Society, May, 1890.

Galvanism in the Treatment of Corneal Opacities. By L. A. W. Alleman, M. A., M. D. Reprinted from the *Brooklyn Medical Journal*, November and December, 1890.

Imperforate Auditory Canals. By Seth S. Bishop, M. D., Surgeon to the Illinois Charitable Eye and Ear Infirmary, Chicago. Read before the Tenth International Congress. Reprint: *Journal American Medical Association*.

The Abuse of a Great Charity. By George M. Gould, M. D., Ophthalmologist to the Philadelphia Hospital. Reprint: *The Medical News*, November 22, 1890.

Early Exploratory Incision as an Aid to the Diagnosis of some Surgical Diseases of the Abdominal Cavity. By Edwin Ricketts, M. D., Cincinnati, O., Professor of Abdominal Surgery and Gynecology in the Cincinnati Polyclinic; Member of the American and British Medical Associations, etc. Reprint: *Transactions Medical Society of Virginia*. 1890.

Further Notes on the Chigger (Septus Irritans). By Dr. H. M. Whelpley, F. R. M. S. Reprint: *Popular Science News*, July, 1890.

Treatment of Uterine Fibro-Myomata by Abdominal Hysterectomy. By J. C. Irish, M. D., Lowell, Mass. Reprint: *Boston Medical and Surgical Journal*, September 25, 1890.

The Treatment of the Morphine Disease. By J. B. Mattison, M. D., Brooklyn, N. Y. Reprint: *The Therapeutic Gazette*, September 15, 1890.

The Naturalist's Leisure Hour and Monthly Bulletin, December, 1890. A. E. Foot, 4116 Elm avenue, Philadelphia.

Thirty-fifth Annual Announcement of the Kentucky School of Medicine. Louisville, Ky. Session of 1891.

HEALTH BULLETINS.

State Board of Health of Tennessee, November 20, and December 20, 1890.

State Board of Health of Michigan, December 5, 1890.

State Board of Health of New York, October and November, 1890.

Report of Deaths and Contagious Diseases, Newport, R. I., November, 1890.

Abstract of Sanitary Reports United States Marine Hospital Service. Volume V., Numbers 48, 49, 50, 51, and 52. 1890.

Miscellany.

THE MONIST (philosophical quarterly) for January, 1891, contains: The Architecture of Theories, by Charles S. Pierce. Illustrative Studies in Criminal Anthropology. (1). "La Bête Humaine" and Criminal Anthropology. (2). Psychiatry and Criminal Anthropology. *a.* Secretion of Criminals. *b.* Power of Smell. *c.* Taste. *d.* Walk. *e.* Gestures. *f.* Morphological Anomalies, Skeleton, Skull, Wrinkles. *g.* Tattooing, by Prof. Cesare Lombroso. The Squaring of the Circle. The history of the problem from the most ancient times to the present day, by Hermann Schubert. The Criterion of Truth. A Dissertation on the Method of Verifica-

tions, by Dr. Paul Carus. *Five Souls with but a Single Thought*—*The Psychology of the Star-Fish*, by Carus Sterne. *German Philosophy in the Nineteenth Century*, by Prof. Friedrich Jodl. *Recent French Philosophical Works*, by Lucien Arréat. *Book Reviews*. *Contents of the Philosophical Periodicals of America and Europe*. (The Open Court Pub. Co., Chicago.)

AN INTERESTING LITERARY PERSONALITY.—The January number of the *Cosmopolitan* contains the first of two parts of the new novel by Mrs. Van Rensselaer Cruger, whose “*Diplomat’s Diary*” and “*A Successful Man*,” the latter first published in the *Cosmopolitan*, excited so much comment both in this country and in Europe. She is undoubtedly the most interesting personality who has appeared in the literary field since the entrée of *Amelie Rives*; but, unlike *Miss Rives*, who was brought up amidst the country surroundings of a Virginia home, and who was a girl in her teens when she began to write, Mrs. Cruger has been for years a leader of New York society, and has spent a couple of Winters at some of the most famous courts of Europe, and, while yet a very young woman, has enjoyed the richest experiences of life.

With a view to the introduction of the *Cosmopolitan* to the readers of this journal, we propose to do even better than the very low price of the magazine. To those who have never been subscribers to the *Cosmopolitan*, we will furnish the *BUFFALO MEDICAL AND SURGICAL JOURNAL* and that magazine for \$3 for the two.

FAMOUS YET UNKNOWN.—*Wives who are hidden by their husband’s fame, yet who are wonderful women*.—The wife of a famous man will oftentimes be completely hidden by the dazzle of her husband’s fame, and it is astonishing how little is known of those women whose husband’s names are household words throughout the country. While the newspapers teem with the name of Thomas A. Edison, nothing is comparatively known or heard of Mrs. Edison. Every newspaper reader knows the name of Chauncey M. Depew, but of Mrs. Depew only the most casual reference is made. Even in England, no one ever hears of Lady Tennyson, or of Mrs. Gladstone. And the same is true of the wives of such men as P. T. Barnum, Will Carleton, John Wanamaker, Spurgeon, W. D. Howells, Dr. Talmage, “Mark Twain,” and James G. Blaine. Often these very wives have been the makers of their husband’s careers. Their portraits are even less known than their lives. In a splendid series to be called “*Unknown Wives of Well-known Men*,” *The Ladies’ Home Journal*, of Philadelphia, will, during next year, sketch all these women and others, presenting their portraits, in many cases, for the first time to the public.

A REGULAR physician wishes to form a partnership with some prominent physician in Buffalo. He is thirty-seven years old, and has been sixteen years in practice. Has been a private student with the most able gynecologists and abdominal surgeons in England and on the Continent. Wishes to confine himself principally to diseases of women and abdominal surgery. Will correspond or visit and give the best references. Address C., BUFFALO MEDICAL AND SURGICAL JOURNAL.

THE LITERARY DIGEST is an almost indispensable weekly visitor to a gentleman's library table. It contains political and sociological reviews and selections; also extracts from all the leading newspapers relating to education, literature and art, as well as science, religion, and miscellaneous departments. The department allotted to The Press is especially to be commended as affording to a busy man an opportunity of knowing the most important views of the best domestic and foreign journals on current topics; and, finally, it gives an index of periodical literature that is of great value. It is published by Funk & Wagnalls, 18 and 20 Astor place, New York.

NEARLY READY.—Transactions of the American Association of Obstetricians and Gynecologists. Volume III., for 1890. A handsome book of nearly 500 octavo pages, profusely illustrated, and containing the latest literature on the most important questions relating to abdominal surgery, obstetrics, and gynecology. Price, cloth, \$5.00; half Russia, \$6.00. Orders should be placed promptly, as the edition is limited. Address the printer, William J. Dornan, 100 North Seventh street, Philadelphia, Pa., or William Warren Potter, M. D., Secretary, 284 Franklin street, Buffalo, N. Y.

THE OPEN COURT PUBLISHING CO., of Chicago, will publish immediately, in two handsomely bound and printed volumes, a new authorized translation of Gustav Freytag's well-known novel, "The Lost Manuscript." This is regarded by critics as the most charming of the famous German writer's works.

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NOTICE TO CONTRIBUTORS.—We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the JOURNAL should be handed in before the first day of the month. The Editors are not responsible for the views or opinions of contributors. All communications should be addressed to

284 FRANKLIN STREET, BUFFALO, N. Y.

THE RATIONALE OF INFLUENZA.

THE following remarks by Dr. Laffont, Professeur de Thérapeutique à la Faculté de Médecine de Lille, will be read with interest: The epidemic which was such a cruel scourge last Winter is again appearing, although up to the present in a milder form. It may, therefore, not be without use to consider, at the present moment, the most rational treatment of this affection, at all times painful, and sometimes, from its complications, serious. This malady is, I consider, a contagious catarrhal affection, in its milder form known to us as "grippe," but from its recent serious epidemic character christened "influenza," a name it will probably retain henceforth. The symptoms of this complaint are manifested invariably by a functional depression, more or less marked, of the whole system varying from simple lassitude, stuffiness of the nose and slight gastric obstruction, all premonitory symptoms of a large number of contagious diseases, and fortunately often constituting the only symptoms of the malady, which in such cases passes for ordinary "grippe."

In the late epidemic, to these premonitory symptoms succeeded all the characteristics of grave typhoid infection: nausea, fever, muscular pains, delirium, pneumonia, with tendency to suffocation and complete prostration. In the discussions at societies and in medical journals on its etiology, some described it as a simple catarrhal affection, more or less grave, having for cause the influence of the external conditions of the atmosphere, and denied its contagious character, others sought at once for the microbe. In the midst of these etiological discussions, no therapeutic law was propounded, and the medical journals were advocating here aperient medicine, anthermics: there, the Vin Mariana (made from the coca of Peru) and tonic medicines; elsewhere, counter irritation and balsamics were said to do wonders; almost everywhere was admitted the specific effect of sulphate of quinine, or still better, salts of quinine, above all, antipyrin. From my own experience, based upon a great number of cases, and on myself in particular, I have no hesitation to assert that the method which succeeded the best was essentially eclectic. Thus, at its first manifestation, I was able to arrest the development of the disease by administering an aperient (oleum ricini by preference), then causing thoracic revulsion by rubefaction, or even vesication, and by provoking simultaneously a non-depressing diaphoresis, easily obtained by administering several times in the day a grog made from Vin Mariani, one-third wine and two-thirds water, very hot, with sugar, such as has been prescribed by the learned laryngologist Fauvel, for hoarseness and loss of voice, a "frigore."

In the presence of influenza in the stage when the patient was completely depressed, very far from ordering antipyrin, which only augments the depression, I found it much more effectual to administer strong tonics, such as generous wines, champagne, whisky rum, cognac, tonics physical and moral, such as the preparations of Coca Mariani, Vin and Elixir, at the same time causing revulsion and administering repeated aperients. From this treatment I rapidly cured myself, and observed the same results in patients without that long and tedious convalescence due, as I think, to the weakness caused by the use of antipyrin.

I advise, then, as a rational treatment for influenza and kindred affections : first, gentle purgatives ; second, diaphoretics and revulsives ; third, strong tonics.

London, November 19, 1890.

—*The Medical Press and Circular.*

A. W. MACFARLANE, Fellow Royal College Physicians, Edinburgh ; Fellow Royal Medical and Chirurgical Society of London ; Examiner in Med. Jurisprudence in the University of Glasgow ; Honorary Consulting Phys. (late physician) Kilmarnock Infirmary ; formerly Examiner in Medicine and Clinical Medicine in the University of Glasgow, etc., etc., in his monograph, "Insomnia and its Therapeutics," says :

"Bromidia (Battle) has, in several instances, been found reliable in drachm doses, given in syrup and water at intervals of an hour until sleep is induced." — *Woods' Med. and Surg. Monograph*, Sept., 1890.

THE QUEEN'S LATEST OFFER. *A Free Education or One Year's Travel in Europe.* — In *The Queen's* "Word Contest," which the publishers of that magazine announce as the last one they will ever offer, a free education, consisting of a three years' course in any Canadian or American seminary or college, including all expenses, tuition and board, to be paid by the publishers of *The Queen*, or one year abroad, consisting of one entire year's travel in Europe, all expenses to be paid, will be given to the person sending them the largest list of words made from the text which is announced in the last issue of *The Queen*. A special deposit of \$750 has been made in the Dominion Bank of Canada, to carry out this offer. Many other useful and valuable prizes will be awarded in order of merit. The publishers of *The Queen* have made their popular family magazine famous throughout both Canada and the United States by the liberal prizes given in their previous competitions and as this will positively be the last one offered, they intend to make it excel all others as regards the value of the prizes. Send six two cent U. S. stamps for copy of *The Queen* containing the text, complete rules and list of prizes. Address *The Canadian Queen*, Toronto, Canada.

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Original Communications.

PATHOLOGY AND TREATMENT OF LATER STAGES OF COXITIS.¹

BY HERMAN MYNTER, M. D.,

Professor of Surgery, Niagara University.

WHILE our increased knowledge of the pathology of tuberculous joint affections has resulted, in most joints, in clearer indications for operative treatment and improved methods, the same cannot properly be said about tuberculous affections of the hip-joint. We still find the same disagreement between the adherents of conservative and operative treatment, and I scarcely say too much when I state that in the vast majority of cases excision is still made as *ultimum refugium* only. Yet even in these cases a better knowledge of the pathology, and consequently improved operative methods, have been followed by decreased mortality and improved functional results. We are still a long way from performing arthrectomy in the hip-joint as we do in the knee-joint, but the time will surely come when we will cut down upon and remove the local focus, instead of waiting till the whole joint has become disorganized. I propose in this paper first to give a short description of the pathology and some of the symptoms of coxitis, and thereafter particularly discuss the treatment of this the most severe lesion of childhood.

As I said, our knowledge of coxitis has been improved. We formerly believed that tuberculous affections of joints commenced as diffuse inflammations, which went on to destruction of the joints.

Post-mortem examinations were rare except in cases which represented the late stages of coxitis. In these the synovial membrane was always found diffusely diseased, the ligaments and

1. Read before the Buffalo Pathological Society.

the perisynovial tissue changed to a gelatinous, edematous, or fibrous tissue, the joint itself filled with fungous granulations, the cartilages generally ulcerated and shed, leaving the epiphyses in a state of softening and caries. But often we found the cartilages more or less intact, and we therefore believed that the synovitis was the primary lesion, the disease of bones and cartilages secondary. The tuberculous bacillus was unknown, and we supposed a dyscrasia present. Furthermore, all acute infectious diseases were known to be followed occasionally by inflammation of the joints, which always commenced as a synovitis, as in pyemia, puerperal fever, typhus, scarlet fever, etc. It was acknowledged that the inflammation occasionally might commence in the bone, but it was believed that it even then commenced as diffuse inflammation of the medullary tissue in the epiphyses. We overlooked that these diffuse processes, whether in bone or synovialis, were secondary and were the result partly of an infection, partly of reactive and reparative processes.

It is the Germans, particularly the late lamented Professor Volkmann and Professor Koenig, both of whom I quote extensively in this paper, to whom belongs the credit of proving that the fungous or tuberculous joint affections commence, in the majority of cases, as a local focus in the bone, and that the consecutive entrance into the joints of the *materia morbi* from the local focus produces the diffuse inflammations of the synovialis and the epiphyses. That the disease, in a few cases, may commence as a synovitis is not denied. Although post-mortem examinations are rare in the early stages, they are sufficiently frequent to prove this. Nevertheless, the fact remains that the vast majority of cases commence, as Volkmann says, as an osteitis and not as an arthrosis, and more particularly as a circumscribed cheesy or tuberculous osteitis or osteomyelitis. It depends upon circumstances whether the joint later becomes attacked, viz. : whether the products of the inflammation perforate into the joint, or seek the surface. The primary focus, at least in childhood, is always in the bone, either central, or near the periosteum. Generally, only one focus is present, and it is rarely the case that both epiphyses are attacked simultaneously. The focus is generally small, as large as a cherry-pit, or at most as a nut. The neck is the point of predilection in the near neighborhood of the epiphyseal cartilage, but it may commence in the head, the diaphysis, or trochanter major, and perforate the epiphyseal cartilage in order to invade the epiphysis. It may even

commence as a chronic osteomyelitis in the cavity of the femur and work its way upward. Primary attacks of the acetabulum, too, are not rare.

The focus presents itself as a little cavity filled with cheesy granulations, bone detritus, and sometimes a sequestrum and surrounded with a pyogenic tuberculous membrane. If the focus perforates into the joint, tuberculous synovitis occurs with very acute symptoms.

If the focus is in the neck or trochanter major, the joint occasionally escapes, the osteitis and abscess being extracapsular, but on the other hand, an acute osteomyelitis, starting in the diaphysis of the femur, may extend into and perforate the joint, producing an acute inflammation but without tuberculous bacilli.

While the osteitic process is going on in the epiphysis and before perforation takes place into the joint, we may discover changes in the joint itself. The synovial membrane, the periosteum, and the periarticular tissue become more or less infiltrated and edematous, slight exudation may occur and a partial obliteration of the joints may take place; little by little the whole synovial membrane may be changed into a granulation tissue, and yet we have no tuberculous arthrititis. When at last the perforation takes place, it is into a half obliterated joint, and the symptoms are, therefore, proportionately less, as a joint reacts the more severely to infectious products when the synovial membrane is physiologically intact, and the less severely the more the synovial membrane has been changed into a granulation-tissue. This partial obliteration we meet particularly in the knee-joint, but less often in the hip-joint. We are, therefore, more apt to meet an acute suppurative arthrititis in the hip, although, occasionally, we may see in the hip a central necrosis of the head and neck being followed by an obliteration of the joint, thereafter destruction of the epiphyseal cartilage and diastasis of the head, which meanwhile has become firmly attached to the acetabulum.

As a rule, the hip-joint is attacked early, as the whole neck and head is inside the synovial capsule, but we may see the joint escape even when the focus starts as a central necrosis in the head or neck. A carious fistule may then be found perforating outward through the trochanter major. This fact is of importance as indicating the way in which such a central necrosis may occasionally be attacked, through trephining of the trochanter and the neck or by ignipuncture.

In the few cases in which the disease commences as a synovitis the final result is the same, destruction of the joint, caries of the bone, etc. The round ligament, which is covered with synovialis, is early attacked and softened, and then disappears.

The osteitic process generally commences at the place of insertion of the round ligament to the head and the acetabulum, and on the neck at the place where the synovialis is attached.

The cartilages become ulcerated by pressure of the granulations (Volkmann's Ulcerative Decubitus), or shed by pressure of the granulation-tissue, meanwhile developed in the dilated Haversian canals. The bones are now in a state of osteoporosis; the head loses its roundness and becomes smaller from pressure, just as the acetabulum enlarges by pressure upwards and backwards or becomes perforated by gradually developed decubitus, and spontaneous dislocation and intrapelvic abscesses result. A periostitis of the ileum occurs as a result of the irritation of the dislocated head, which, under favorable circumstances, may lead to the formation of a new joint. Periarticular abscesses are rarely the result of the breaking down of granulation-tissue in the periarticular tissue. They occur usually from softening and perforation of the capsule itself. They appear often in front, having previously perforated into the iliac bursa. They then extend down on the femur or into the pelvis over the rim. Frequently, too, an abscess perforates above the trochanter minor at the lower margin of the ext. obturator muscle, extending from there to the adductor muscles or backward into the gluteal region, where it then opens near the trochanter major below the gluteus maximus muscle.

A pelvic abscess, from absorption and perforation of the acetabulum, generally follows the iliac muscle downward, but may extend down in the cavum ischio-rectalis, having previously perforated the internal obturator muscle and its covering iliac fascia, and then open into the rectum, perineum or goes down on the femur. It may also perforate backward through incisura ischiadica major.

The symptoms of coxitis are, of course, well known and I shall therefore only call attention to a few minor points. Bonnet has explained the cause of abduction, flexion and rotation outwards in the fact that the capsule can contain more fluid when the limb is in that position. By strongly injecting the capsule in a cadaver, this position is obtained if we previously amputate the femur in the middle. Bonnet thinks that the change from abduction to adduction is simultaneous with perforation of the capsule. I believe that

Koenig's explanation is more correct. He thinks that the position of the limb during the night is the real cause of the deformity, particularly the adduction. He believes that children, who walk around with a coxitis without a crutch or support, by intuition put the limb in abduction and rotation in order to have less strain on the diseased head. They are then obliged to bring the healthy foot forwards quicker in order to save themselves from falling. On the other hand, those patients who present themselves with an early adduction and rotation inwards have either not walked at all or walked with crutches. They have either been in bed for a time, lying on the healthy side, with the diseased limb supported across the healthy one in adduction and rotation inwards, or they have walked with crutches and on purpose raised the pelvis on the diseased side to avoid stepping on the foot. They represent the more severe cases and generally have osteitis of the head of femur. Furthermore, the change from abduction to adduction is almost always contemporaneous with increased intensity of the inflammation, so that the patient is forced to go to bed or use crutches. I myself had a patient (a girl) present herself a couple of weeks ago with the limb in adduction and rotation inwards, who had been sick for only twelve days. The intense pain, the great fixity and the inability to bear any support on the limb so early would necessarily indicate an inflammation on the point of contact, the head, and the adduction and rotation inwards confirmed in my estimation the diagnosis.

Generally speaking, abduction and rotation outwards are most constant in the start; flexion may be wanting. Rotation outwards may occasionally be present alone in the beginning. In the later stadium adduction, rotation inwards and extreme flexion generally occur. Muscular contractions maintain the different positions for a short time only, being followed by further changes such as cicatricial retraction of deep and superficial fascia and fibrous degeneration of the flexor muscles, by which the false position becomes permanent.

In regard to diagnosis little needs to be said. A real shortening without dislocation indicates enlargement of the acetabulum. The swelling in the beginning is most prominent in front, so much so that the ant. cruralis is more prominent. It probably indicates effusion into the joint, and I have several times demonstrated this by puncture of the joint. The swelling of the neck and trochanter indicates osteitic processes in these parts. A considerable uniform elastic swelling behind and above the trochanter major occurs rather

late and indicates enlargement of the acetabulum and formation of abscess. The contour of trochanter disappears then so that the tip cannot be felt, and the whole region is strongly prominent on account of the adduction. If the disease occurs primarily with adduction, rotation inwards and severe pain, we may be pretty sure to have an osteitis of the head. In osteitis beginning in the neck and trochanter we will generally find these parts enlarged and tender on pressure. Symptoms indicating destruction of cartilages and the epiphyses, such as starting pains, point to progressive joint affection. Yet it is impossible in a general way to differentiate a primary osteitis from a synovitis. In regard to treatment, I shall only mention, not discuss, such measures as can be found in every surgical text-book, such as rest, extension, derivation, ice, cod liver oil, hygienic measures, etc. Where everything is favorable, as among the rich and educated, results with conservative treatment are generally good. Coxitis may recover in any stage, of course with more or less deformity. In early forms perfect recovery, perhaps with slight contraction and stiffness, may take place. I have myself seen one case, a boy of twelve, after having been in bed for six months with serious deformity, recover so perfectly that for ten years he had absolutely a normal joint. Lately he has had slight symptoms again.

In later stages recovery may take place with true or false ankylosis, or after dislocation, but the usefulness of the limb depends upon the amount of flexion and adduction. Most of our patients, however, come from poor and unsanitary homes, have had poor food, poor air and suffered, in most cases, great neglect. They present themselves in our hospitals emaciated and cachectic, with abscesses and fistulas, and perhaps with symptoms of amyloid degeneration of kidneys and liver, or with Bright's disease. All the resections I have made have been done in such cases, yet the results, both in regard to health and function, are sufficiently encouraging and compare more than favorably with the results of conservative treatment in similar cases. I doubt whether one of them would have been cured hady without operation. It must not be forgotten that the statistics of resection must be compared with the statistics of those conservatively treated cases, in which abscesses were present. When we examine the older and newer statistics it must be acknowledged that there is a great decrease of mortality. Leisrink, for instance, gives a mortality of 60 per cent. after resection, of which 20 per cent. subscribed to wound-complications, 21 per cent.

to marasmus, 11 per cent. to phthisis, 2.8 per cent. to diarrhea, 7.5 per cent. to amyloid degeneration and 3.6 per cent. to relapse of caries. A more recent English statistic of 320 cases showed a mortality of 40 per cent. Jacobson has increased Leisrink's statistic of 176 cases to 250 cases and finds a mortality of 40 per cent.

The result of conservative treatment was even worse. Of sixty-three conservatively treated cases in Copenhagen 73 per cent. died and 27 per cent. recovered. An English statistic of 384 conservatively treated cases, in all of which abscesses were present, showed a mortality of 67 per cent., a recovery of 33 per cent.

If abscess was not present, 69 per cent. recovered.

Grosch (1882) found a mortality of 28 per cent. under antiseptic treatment. Koenig states in a recent work, that it is an exception that a patient dies after resection from acute or chronic sepsis.

In spite of the decreased mortality following excision, surgeons still differ in regard to the advisability of conservative or operative treatment. Two English surgeons of large experience, March and Wright, represent well the different opinions. March is strictly conservative and considers excision uncalled for. Continued rest, he says, gives a mortality of only 5 per cent. and 70 per cent. recover with slight lameness and loss of motion. Even when suppuration has occurred he gives a mortality of only 6 or 8 per cent. He considers excision of doubtful benefit even in cases in which the bones have become extensively carious, matter has burrowed widely and the general health has suffered. The operation, he says, will be fatal in 10 per cent. and without improvement in 25 per cent. more. Dr. Wright, on the other hand, with an experience of more than one hundred cases of excision, of which only three died as a result of the operation, strongly advocates excision as soon as external abscesses occur, yes, even before the capsule has been perforated. He maintains that excision cuts short the disease, saves pain, lessens time of treatment and gives a better limb, particularly in hospital cases. Osteomyelitis once established, nothing short of excision can, in his opinion, prevent the progress. Nature can, of course, get rid of the caries and necrosis, but the children who can survive the elimination are few, except among the well-to-do.

The decreased mortality and the better functional results are, as I have said, the results of our increased knowledge of pathology and improved operative methods. Formerly we simply excised the head and perhaps neck and trochanter, but we left the tuberculous synovial membrane and the pyogenic membrane surrounding the

abscesses, and we discredited the operation because, as might be expected, suppurations continued or increased and our patients died of marasmus, amyloid degenerations, or tuberculous affections somewhere else. Modern pathology has taught us that coxitis is primarily an osteitis, secondarily a tuberculous synovitis and arthrititis, and that it is necessary not only to remove the bone affections, as we formerly did, but to remove the tuberculous synovial membrane as well. I ascribe my success in excision of the hip principally to the minute and painstaking extirpation of the tuberculous synovial membrane, both of joint and abscesses. If anything is left of that, relapse is sure to occur. Secondarily, I ascribe the success to the antiseptic treatment. If all diseased tissue of bone and synovial membrane is removed we may get healing of the wound by first intention even, just as we see it in operations on knee-joints. I am even inclined to go a step farther than Wright does and advocate still earlier operation in order to remove the local focus and the synovial membrane, if diseased, before diffuse inflammation of the bones has occurred,—in short, make an arthrectomy of the hip-joint instead of an excision. I have so far had no opportunity to carry out this idea, as all my cases have presented themselves in the late stages, or else would not submit to an early operation; but I find in the *New York Medical Record* of November 1, 1890, the first mention, as far as I know, of a case in which this operation was performed successfully.

Mr. W. H. Battle reports in the London Clinical Society a case of a child, six years of age, in which suppuration of the left hip joint of tuberculous nature was present. The joint was opened by anterior incision (Barker's) and a large quantity of pus removed. The capsule was swollen and softened. A hole was felt in the anterior aspect of the neck, just below (external to) the upper epiphysis.

This was scraped out after enlarging the wound and everting the femur, leaving a mere cylinder of bone to support the head of the femur. The cavity of the bone and the joint were both washed out with chlor. zinc (1:30), and corros. sublimate. The wound was closed with deep catgut sutures without drainage, and within four weeks the child could walk without pain or lameness. The child was subsequently readmitted with a strumous abscess of the supercondyle region on the right leg, but the left hip-joint appeared in every way perfect. The operation here performed has strictly been an arthrotomy with removal of the local focus, and the operation

was probably performed before perforation into the joint had occurred. I do not see any reason why in slightly later cases a typical arthrectomy, *i. e.*, removal of the tuberculous synovial membrane and the local focus, should not be performed, and I hope before long to have the opportunity of trying this method.

I would, of course, first try absolute rest and extension for a few months, open an abscess, if present, or try the iodoform injections, recommended by Mikulicz and Bruns, of Tübingen, on the supposition that prolonged contact of iodoform with tuberculous granulations result in their cure. He uses ten parts iodoform to fifty parts of glycerine and fifty parts of water, and injects it into the abscesses or joint after having first removed the pus by aspiration.

If there is a fungous arthrititis present, he injects 2-4-6 cub. cent. into the granulations. If effusion is present 10-30 grams are injected, after aspiration. In abscesses 50 to 100 grams are injected. Parenchymatous injections are repeated in eight days, joint injections in two to four weeks. Improvement cannot be expected in less than six or eight weeks. The fungous granulations atrophy, the periarticular abscesses shrink into hard nodules. Bruns gives 80 per cent. cures or improvements. If the disease continued in spite of this treatment I should consider myself justified in trying this method. Besides, an early operation would probably prevent tuberculous meningitis. Koenig has pointed out that the dissemination of tuberculous matter during operation is particularly frequent after excision of the hip.

Gerster explains this in the way most excisions are made, the blunt force used, the forcible manipulations which all help to carry the freed caseous matter into the severed veins and lymphatics.

If we were able to diagnose with certainty a central necrosis in the head or neck, trephining through trochanter major or ignipuncture though the same would be indicated early, before the joint had become involved, but it is impossible to diagnose this condition with certainty, although swelling and tenderness around the neck with absence of distinct joint symptoms may make us suspicious.

There is still one point to consider, *i. e.*, what to do if the coxitis starts in the acetabulum. It is probably impossible to diagnose this affection in the start, before intrapelvic abscess has occurred, I have always believed that an intrapelvic abscess, following a coxitis, was a sure sign of affection of the acetabulum, primarily or secondarily, and that it was an absolute indication for resection of

the hip as we in no other way could reach the diseased bone and open the abscess. But it seems that there is another way by which we are able from the cavity of the pelvis to expose the inner surface of the acetabulum, open the intrapelvic abscess and eventually resect the acetabulum. Bardenhuer of Cologne has an article in *Deutsche Med. Wochenschrift*, 1890, No. 19, bearing on this point, in which he mentions three cases operated by aid of his symphyseal incision. The operation is performed in the following manner: An incision is made just above the symphysis and along the Poupart's ligaments, extending from the outer third of one Poupart's ligament in a transverse and downward convex direction to the outer third of the other Poupart's ligament, through the skin and subcutaneous tissue. The muscoli pyramidales, the anterior fascia of the rectus muscles and these muscles themselves are now cut through, and the insertion of the abdominal muscles to Poupart's ligaments severed. The inguinal canal and the cord are in males drawn outwards.

The fibrous connection between the bladder and the posterior surface of symphysis are now severed as are the ligamenta vesicalia mediana and lateralia, and the bladder sinks backwards. We are now in on the anterior surface of the bladder, the wall of which may be recognized by the yellow-colored longitudinal muscular fibres. The bladder may be attacked through this wound. By keeping next to the posterior surface of the symphysis we may reach the prostate and urethra in men, and laterally the arcus tendineus of the pelvic fascia in both sexes, but it is then necessary to loosen the peritoneum in the iliac fossa commencing anteriorly and working backwards along the linea arcuata interna. We are then on the inner surface of the acetabulum, and may, if necessary, resect it with chisels or only open the abscess.

From theoretical reasons I should think the inner surface of the acetabulum might easier be reached by a semi lunar incision along the tuberositas ischii, opening the excavatio ischio rectalis and working up along the inner surface of the tuberositas ischii. We would only meet one important vessel, art. pudenda communis, which probably could be easily secured in the wound.

Lastly, the question presents itself whether the limb is better after excision or after conservative treatment. Holmes thinks that shortening is generally greater after excision, and the limb less firm and less useful. Motion is more frequently present and more extensive, but the patients often walk more insecurely and with more

limp. Jacobson thinks the average results obtained by conservative treatment superior to those following excision, particularly in adults, where we often get flail-joints after excision.

Wright, with his large experience, thinks that excision gives better results and that much shortening depends upon using the limb too early. Some shortening is, of course, always present.

I scarcely consider the question a fair one. It is evident that the best result following excision cannot compare with the best result following conservative treatment, *i. e.*, *restitutio ad integrum*. We must compare those conservatively treated cases, who have got well in spite of abscesses, caries and years of suffering, with those in which, for the same reasons, excision was made. Few get well by conservative treatment, extending during years, without considerable flexion and adduction. To treat such a case demands such continual patience from the side of the parents, the patient and the surgeon, that a good functional result is almost out of the question unless the patient be treated in a hospital, where the surgeon has complete control over the patient and the nurses. The question, to be fair, ought therefore to be as follows: Is a flexed and adducted limb more useful than a shortened limb after excision?

Judging from my own limited experience I believe that excision gives a better functional result and a better looking leg than conservative treatment does in the majority of cases, particularly if you can sever the bone above the trochanter minor. If you are forced to go below the trochanter minor you are very apt to get a flail-joint. I have seen in Buffalo a large number of patients with hip-joint disease, and, as far as I remember, excised the hip eight times. All of these cases except two presented themselves in the third stage of coxitis with extensive carious destruction, large abscesses and broken-down constitutions. Two of the cases I treated under favorable circumstances from the start, but in spite of all precautions they went from bad to worse and excision became necessary. Two of the eight died, one from convulsions during scarlet fever, contracted at the General Hospital immediately after the operation; the other from Bright's disease six weeks after the operation. On the first of these cases I had made an arthrectomy on the knee-joint of the other limb three months previously, and the wound had healed by first intention and the result was excellent. The second case had albuminoid degeneration of liver and kidneys and the operation was done as a last measure. The other six recovered. I can show

you four of these cases to-night and will let you judge for yourself whether the results are favorable or not. In order to compare the results with those conservatively treated, I bring before you another patient who was treated in the town under unfavorable circumstances, but in spite of which recovery took place in a flexed and adducted position. His leg, it seems to me, does not compare favorably with the operated ones, so far as appearance is concerned.

195 FRANKLIN STREET.

A DISCUSSION OF VAGINAL HYSTERECTOMY WITH OBSERVATIONS ON ELEVEN CASES WITH ONE DEATH.¹

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DR. CHARLES EGERTON JENNINGS, in his recent masterly work on cancer,² assumes the position, in cases in which that malady involves the womb, that partial excision of the organ should be practised when the disease is recent and "localized in the lower part of the cervix;" but that "if the disease has already extended so far that normal mobility of the uterus is diminished, the mere excision of the intra-vaginal, or even the supra-vaginal portion of the cervix will probably be quite inadequate to prevent the recurrence of the disease. Therefore, the anticipated recurrence should be forestalled by excision of the entire uterus."

The foregoing is such a complete summary of the fallacious doctrines of treatment -- all the more dangerous because they contain some truth -- that are happily only occasionally met with nowadays, but that sometimes come with such a stamp of authority -- as in the present instance -- that I take the quotation as a text for the further discussion of the important subject of vaginal hysterectomy. It would seem that such a discussion was not needed in the midst of the voluminous literature on the subject, which has come like an avalanche upon the profession within the last few years; but careful attention to that literature will reveal the fact that surgical treatment of cancer of the womb is not yet fixed upon definite lines. It falls to the experience of all of us to almost daily

¹ Read at the Annual Meeting of the American Association of Obstetricians and Gynecologists, September, 1900.

² Cancer and its Complications. By Charles Egerton Jennings, F. R. C. S., etc. London, 1899.

encounter cases of this malady that have either neglected themselves or have been neglected by their physicians, or have been flatly advised by the latter against any operative interference whatever. So long as this state of affairs exists, just so long should writers continue to emphasize the fact that cancer of the womb is a disease capable of cure by extirpation. It falls to the experience of most of us, also, to encounter vacillating opinions among operators as to the proper course to be pursued when these cases do become applicants for surgical relief. So long as this state of affairs continues, and so long as it finds warrant for its continuance in expressions such as I have quoted, just so long should the controversy be kept open.

In approaching a discussion of this question we find just two propositions which are accepted by the profession as axiomatic, viz.: (1) cancer of the womb, if not treated, is uniformly fatal: and (2) treatment, to be effective, must involve removal of all the cancerous tissue. The pathological conditions antecedent to these conclusions have been held open to debate, but, save Mr. Buntlin, I know of no reputable authority that today contends for the primary constitutional origin of cancer. The theory of Waldeyer, as subsequently confirmed by Tait, viz., that cancer is always primarily of epithelial, and consequently of local, origin is accepted with practical unanimity. If we use the word epithelium as the generic term embracing endothelium of blind follicles within its meaning, I cannot discover that latter-day observations have in the least disturbed this well-demonstrated doctrine. If, now, cancer is thus always primarily local in its origin, and if, as has just been declared, it is uniformly fatal if not treated, it follows that the disease, essentially progressive in character, must advance either by the continuous invasion of adjacent normal tissue or by migration of cell-elements either through the lymphatic or hemic circulations. The histological arrangement of strictly cancerous growths prevents the easy invasion of the hemic channels, and the lymphatics, present in the uterus in large numbers, are generally so dormant in the non-gravid womb, that they do not serve as avenues through which metastatic changes are effected; it follows, therefore, that the advancement of these growths depends upon the progressive invasion of the normal matrix. This manifestation of malignancy, in turn, depends upon rapid endogenous cell-proliferation-- a power inherent in one as well as in many of these constituent cells; it again follows, therefore, that an attempt at removal which will leave a single one of these

cells will, by that omission, leave a nidus for the invariable redevelopment of the disease. This train of thought brings us forcibly to the second conclusion, already announced, viz., that the only way to cure cancer effectually is to remove absolutely all its elements.

Thus far I feel that I have encountered no serious dispute, but the next question that arises is, How are we to make most sure of the removal of all the disease? This brings me at once to my controversy with Dr. Jennings, and with those who, like him, affect a course of conduct which they choose to call conservative. I believe in that conservatism which conserves human life, but I do not believe that Dr. Jennings's conservatism best subserves this important end.

A fairly industrious research among the most recent writers on the pathology of uterine cancer confirms my own limited observation that, cases of epithelioma aside, malignant disease of this organ has its initial lesion in the endothelium of the submucous follicles, and that the extension of the disease is by the progressive invasion of the submucous tissues. This is one of the most important facts to be taken into consideration when we attempt to judge of the extent of the disease before operation; for it will be seen at a glance that while we may remove a segment of the cervix by means of the scissors, and while we may scrape the canal with the curette to secure aberrant epithelium for microscopical examination, we will yet be utterly unable to determine the farthest invasion of the disease, for the reason that we cannot by those means reach the deeper tissues that are concerned in the early metamorphosis. I cannot in the least agree with Dr. Jennings that the extent of the disease can be accurately determined at the time of the operation of amputation, and I doubt if he can get those who have had the most to do with cancerous uteri to agree with him in this regard. Our most careful pathologists inform us that it is extremely difficult to make out the marginal lines between the areas of cancerous infection and normal tissue; and if it be difficult to settle this important question by means of powerful lenses in the leisure of the laboratory, how impossible must it be to arrive at an accurate conclusion on the same subject by means of the naked eye in the necessary hurry of the operating-room? My first objection to the operation of high amputation, even in cases of early cancer apparently localized in the lower part of the cervix, is that, in consequence of the method by which the disease extends—a method recognized by

Dr. Jennings himself—we cannot know that all the diseased tissue is removed, and that the operation is, for this reason, unsurgical.

Dr. Jennings, in speaking of high amputation of the cervix, alludes to it as an operation “which can be performed without opening the peritoneal cavity and with very slight risk to life.” I am bound to admit that this view is very generally accepted, but I must, at the same time, urge that it is but another instance of the popularity of error with the profession. That the operation can be done without opening the peritoneal cavity is conceded, but that it is frequently not done without opening the peritoneum is likewise true. This fact, however, has no surgical significance one way or the other. That the operation offers but “slight risk to life,” as compared with vaginal hysterectomy, is a declaration the accuracy of which I beg to challenge. In doing so, I fully concur with that distinguished English operator, Professor Sinclair, of Manchester, who recently stated¹ “that, although vaginal hysterectomy was called ‘major,’ it was, perhaps, less dangerous than some of the so-called ‘minor’ operations”; and with Dr. Cullingworth, who, on the same occasion, stated that, after careful study of vaginal hysterectomy in Germany and of high amputation in England, he had found that the mortality of the former was five per cent., while that of the latter was seven per cent., giving a difference of two per cent. in favor of the so-called “major” operation. I am not one of those who accept distinguished opinions, however authoritative, nor favorable statistics however accurate and conclusive, unless the question which they apparently settle is susceptible of rational demonstration. When we remember the almost utter impossibility of keeping the field of operation in high amputation free from subsequent infection, even in ordinary cases, we realize one of its dangers. One of the two cases that I have lost during the last year from sepsis was one of high amputation of the cervix for non-malignant conditions, and one in which antiseptic details were carefully observed. If, then, the danger is so pronounced in non-malignant cases, how much more marked must it be in cases in which is to be added to the danger of infection from decomposing secretions the greater danger of contamination by cancer cells, either from the segment removed or from the remaining portions of the womb. I speak of this as the greater danger, and I feel warranted in doing so by the reflection that by the operation both the systemic circula-

1. *Lancet*, May 17, 1890.

tions—hemic and lymphatic—are opened, and that through the portals thus opened the malignant elements may gain easy access, thence to course their mischievous ways through

“—the natural gates and alleys of the body.”

But infection, whether septic or malignant aside, in matter of technique the operation of high amputation is not without its difficulties. The literature of the operation is marred with the record of more than one death from uncontrolled hemorrhage. The certainty of hemostasis is much greater, particularly with forcipressure, in total extirpation than in high amputation. In one of my cases I found, after dividing the mucous membrane around the cervix, that the carcinomatous invasion had extended beyond the uterus. Acting under a mistaken idea, I endeavored to conclude the operation by doing a high amputation, but I was forced to remove the entire organ to bring the bleeding tissues under control. My second objection to high amputation is, that it is a more difficult and a more dangerous operation than vaginal hysterectomy.

But if it were possible to know that all the diseased tissue had been removed, and if it were true that the operation were easy and safe, I would still be deterred from performing high amputation for a reason that I have not seen mentioned, but which I now earnestly commend to the attention of the Association. It has doubtless fallen to the Fellows, as it has frequently to me, to be called upon to dilate the stump of a cervix, the lower portion of which has previously been excised for the relief of either dysmenorrhea or sterility, or both. It requires no histologist to determine what many a histologist has determined, that the contraction and inelasticity of the stump are due to the presence of a small ring of cicatricial tissue. This ring, in magnitude and consequent inelasticity, is proportionate to the mutilation which it has repaired. As the maximum of mutilation is realized in high amputation, it follows that the maximum of scar tissue is deposited in these cases: so that, even in instances of non-recurrence of the malignant disease, the base of the remaining portion of the uterus, while pervious, is yet hard and inelastic. In other cases, in which the disease has been simply repressed for a time, but in which with characteristic insidiousness it has recurred, the uterine canal may remain patulous. In either event pregnancy is liable to occur. At the recent meeting of the American Medical Association this fact was urged as a

reason for high amputation. It would have been entirely easy for the eloquent speaker on that occasion, himself one of the distinguished operators of America, to have availed himself of the particulars of the following case, which I quoted in my rejoinder to his remarks at the time :

Mrs. H., æt. thirty-four, wife of a clergyman ; was never robust and never pregnant ; was treated during Spring and Summer of 1888 for excessive menstruation. In July the bleeding became so great and so persistent that her physician examined her in August and found bleeding nodules in the cervix. Treatment was of no avail, so that in October she was sent with a letter to Dr. —. Epithelioma was diagnosed, and an operation advised. The consultant came to her home to do vaginal hysterectomy, but instead did high amputation on November 18, 1888. Present and assisting were the writer and three physicians of the town, including the patient's attending physician.

Now, right here, comes in a curious fact in point of diagnosis and treatment. Observe that this operation was done November 18th. In the letter which the patient carried to the consulting, now operating, gynecologist, attention was called to the fact that somewhere in September, 1888, this woman suddenly and unexpectedly, and without regard to treatment, ceased to bleed, and asked if this did not throw some doubt on the diagnosis of cancer. Thus, for a space of at least six or seven weeks a woman with a cancer of the cervix did not bleed until the moment of operation.

She was instructed to visit the operator in ten or eleven weeks, which she did. Not having menstruated or bled one drop since the operation, the question was raised, Could she possibly be pregnant? This proved to be the case, and she had splendid health up to her labor, which began on June 20, 1889, under the care of her family physician.

Palpation showed undoubted uterine contractions. Digital examination revealed—*a blank!*—no os, no cervix, nothing, save a thick mass of cicatricial tissue over the lower end of the womb, and a vertex presentation. At the end of twenty-four hours there were still no signs of an opening. The doctor incised the point that seemed to bulge the most for an inch and a half ; slight bleeding. This was of no avail, and after twelve hours he enlarged this incision. He now had a consultation, and between them they incised several times at the point of this gristle that appeared to be on the greatest strain. At last they made the passage large enough for the head to pass. Forceps were then applied, and labor completed June 24, 1889, at 9.15 A. M. The patient had already one chill, soon followed by a temperature that went to 106°; she had another immediately after delivery. Septic peritonitis followed by death, June 27th, 9 P. M. Child died long, before—several hours before delivery.

From the foregoing graphic particulars, which I have from one of the most accomplished practitioners in the State of Indiana, and whose narrative I have modified only by unimportant omissions in the interest of brevity, furnishes us with food for reflection. It would be possible to take up the question of diagnosis of cancer ; it would be feasible to raise questions as to the propriety of treatment, taking into consideration the alleged character of the disease and the pregnancy which, computed from the delivery at term, must have been of nearly seven weeks' standing at the time of operation ; and it would be entirely just to enter the strongest possible protests against the failure to do a Cesarean section at the time of delivery. I prefer, however, to pass all these questions by for the sake of giving emphasis to one point, viz., death occurred in this case as the result of conditions at the base of the uterus, consequent upon, and induced by, the operation of high amputation of the cervix. If this were an isolated case it would have less significance. Goodell has had occasion during last year to do Cesarean section on a woman with a cancerous cervix, but whether recurrent after high amputation or not I am not prepared to state. Spencer Wells, Bischoff, and Thomas are reported to have had similar cases. My third objection, therefore, to supra-vaginal excision of the cervix is the fact that pregnancy may ensue, and that whether the disease returns or not, the conditions at the outlet of the uterus are such as make delivery by abdominal section the safest means of saving either the mother or the child.

Dr. Jennings, in the passages which I have quoted, advises total extirpation in those cases in which the disease has "already extended so far that the normal mobility of the uterus is diminished." This is my most serious cause for complaint against the distinguished author, for it is precisely this kind of advice that is responsible for all of the mischief following vaginal hysterectomy for cancer. The loss of normal mobility of the uterus under these circumstances means extension of the disease beyond that organ, and when such extension has taken place no operation compatible with primary recovery can eradicate the mischief. It was the failure to appreciate this latter fact, and the obstinate persistence of early operators to subject all recent cases to partial excision and to relegate only advanced ones with lessened mobility to total extirpation, that was chiefly to blame for the bad statistics of the latter operation in the years now happily past. Recent successes by the abdomino-vaginal method show that the primary mortality of 67.2

per cent. on a basis of 119 cases, operated upon by that method and reported, must be attributed as much to delay in undertaking the operation as to any defect in the technique. The statistics of Hoffmeier and Schroeder relative to the ultimate results of the two operations, on a basis of 136 high amputations and seventy-four vaginal hysterectomies, showing 43.3 per cent. of the high amputations well and all the total extirpations dead after four years, are absolutely worthless for the same reason. If Dr. Jennings's teachings are to be taken as an index of English practice today, we at once have the explanation of the fact stated by Mr. Lewers, in a recent discussion before the Obstetrical Society of London, that but thirty per cent. of his cases were without recurrence after two years. In my own experience, based upon eleven cases, with but one primary death, full reports of which, with names of attending physicians, will be found in the transactions of the Ohio State Medical Society for this year, I have had some occasion to study the disastrous effects of delay in operating, but a delay for which I hasten to declare that I was in no instance responsible. My one strictly primary death was in a patient in whom the disease had existed for at least thirteen months, and who was almost exsanguine at the time of the operation. That which we call cachexia in these cases is really but a form of anemia induced by the frequent and persistent bleeding, which lessens the powers of resistance and makes the patients the easy victims of surgical shock. It was from this condition that the patient to whom I have just alluded died, although the operation was a short and easy one, and the disease was yet clearly limited to the uterus.

I have had two cases in which recurrence took place after total extirpation, and with what appeared to be complete removal of the disease. The first of these, a case of medullary cancer of the endometrium of thirteen months' standing, was operated upon January 11, 1896, and was reported to the Obstetrical Society of Cincinnati the following month. The condition of the specimen after the exciting preliminary to the operation, was such that distinguished members of that Society expressed their doubts as to the existence of the disease, and significantly expressed the opinion that the case was one in which the disease would not recur. Recurrences of the cancer of the disease were, however, manifest after twenty months. She died at Randolph, Maine, August 22, 1896, having lived to within about three months of three years after the

operation. I quote briefly from the report of the very thorough autopsy made by Drs. Sawyer and Pitt, August 30th, and kindly communicated to me by Dr. Pitt. The examination was evidently very carefully made, and involved all the abdominal and pelvic organs. I shall, however, quote only such portions as relate directly to the point :

Omentum fatty ; a mass was found projecting three-fourths of an inch, one-fourth of an inch in diameter, white, translucent, like jelly, but harder in consistence. Another was a small red mass like a polyp, the size of a filbert. There were also calcareous patches.

Bowels were thickened irregularly throughout, in many places three times their normal thickness. No ulcerations, but the whole mucous membrane so congested that the blood seemed exuding from the whole surface. The secum was adherent to a mass in the right iliac region, to which was also adherent the right broad ligament. There did not seem to be any ovary there, nor did it appear to have been removed, so must have degenerated. [Neither ovary was removed at the operation.—REED.] The whole mass was hardened and attached to the deeper tissue, covering a space of three and a half by two inches. The inner surface of the cecum was normal, but in place of the appendix ceci was a hole from which depended a mass of red granulations through the opening between the vagina and peritoneal cavity. This opening into the vagina was perfectly healed and smooth, with no granulations upon it, and formed a ring three-quarters of an inch in diameter. The mass of granulations projecting through this ring was the size of a small egg, dark-red in color, soft and friable, with so little connective tissue that it broke down at touch into a bloody mass.

Aside from a perforation of the colon at its juncture with the sigmoid flexure, a pus cavity in the right kidney, which was atrophied, and a calcareous left ovary, no other essential pathological conditions are recorded in this model report from the pen of Dr. Pitt. Specimens of the granular tissue were preserved, but I have not as yet had the opportunity of seeing them. They will be subjected to microscopical examination and a report will be added as an appendix to this paper. From the microscopical appearances so graphically recorded, there can be no doubt that the case was one of "secondary medullary cancer of the peritoneum," a condition recently described by Mr. Fenwick in his *Clinical Lectures on Obscure Diseases of the Abdomen* (London, 1889). This probability is increased by the statement of Mr. Fenwick, that 80 per cent. of the cases observed by him followed primary manifestations in either the uterus or its appendages, the kidneys, or the bones.

My second case of recurrence was carcinomatous in character, and had been observed to exist for seven months, although the history of menorrhagia, verging into metrorrhagia, extended nearly a year farther back. The disease in this instance recurred at the site of removal, although the patient had an interval of good health for six months. In another case of nine months' standing, the disease was found to have invaded the broad ligaments at the time of operation. Of my eleven cases, the average previous duration of the disease was about eight months. Of those now living and well, the average previous duration was but a fraction over five months. One is now living within two months of three years after the operation, another after two years and five months, while the most recent case is of six months' standing.

The progressive advancement of this operation during the last ten years is a source of gratification to its friends. The various collections of cases indicate a diminishing primary mortality :

Year.	Name.	Cases.	Mortality.
1881	Olshausen	40	29 per cent.
1883	Sänger	133	26.6 "
1884	Engstroem	157	29 "
1886	Hegar and Kaltenbach	257	23 "
1890	Martin (F. H.)	134 (American)	14 "

When it is remembered that these are collective statistics, and represent the early experience of many operators, they will be construed as vastly more favorable than they seem. The recent record of individual operators is very satisfactory. The best so far achieved, I believe, is by Kaltenbach, who, at the recent Hegar celebration, reported sixty-two consecutive cases with but two deaths, giving a mortality of but 3.2 per cent. We shall realize precisely the same results when our experience grows, and when the general profession—into whose hands these cases first come—realize that it is their duty to make an early diagnosis and act upon the clearly-established principle that every woman who has cancer of the uterus, and in whom the disease has not lessened the mobility of the organ, should be subjected to the operation of vaginal hysterectomy.

I believe these considerations justify me in the statement that the delay which is called conservatism, and which is practically advised in the paragraph which I have quoted from Dr. Jennings, is radically wrong. The prospect of improving this operation

must come by subjecting early cases to total extirpation, and in declining any operation whatever to those in which the disease has gone beyond the uterus. It is out of the question to restore to health that woman whose womb has lost its normal mobility by the advancement of cancerous disease. As well might one try to make a vigorous man out of the charred remains of the victim of electrocution, or to reconstruct a breathing Cleopatra out of a shriveled mummy from the catacombs of Egypt.

311 ELM STREET.

THE PREVENTION OF PURULENT CONJUNCTIVITIS IN THE EYES OF NEW-BORN INFANTS.¹

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PURULENT conjunctivitis of new-born infants (Syn. *ophthalmia neonatorum*; *blennorrhea neonatorum*) is a most frequent cause of blindness in infancy. The study of this subject in early life, and especially the examination of the young pupils in institutions for the blind, proves conclusively that one-third of all the cases of blindness were acquired in childhood, and lost their vision from *blennorrhea neonatorum*.

Dr. Reinhardt found among 2,168 persons present in twenty-two different institutions for the education of the blind, in Germany, Holland and Denmark, 658 of the inmates, nearly one-third of the number, blinded by *ophthalmia neonatorum*. Professor Magnus found thirty-four per cent. of similar cases in the institution at Breslau. Such facts as these show satisfactorily the great danger which threatens, not only the children of a country like Germany, but the children of every nation, where neglect and carelessness have been present at birth, and no steps had been taken to prevent the resulting dire consequences. If a tabulation of total blindness be arranged, according to the causes which operated from every direction to bring about this condition, it will be found that the conjunctival diseases played the most important part. In such a classification of 2,528 cases of total blindness, made by Professor Hugo Magnus, those of *ophthalmia neonatorum* represented

1. Read before the Buffalo Medical and Surgical Association, December 2, 1890.

10.876 per cent. of this number; and the other contagious forms of the conjunctiva were the cause of 240 cases of total blindness, or 9.492 per cent. Similar investigations made in our blind institutions in this State, at New York City and at Batavia, show that twenty per cent. of these cases of blindness were caused by a neglected treatment of purulent ophthalmia. The United States census of 1880 gave as the total number of blind nearly 50,000, and to this figure we can attribute at least 15,000 blind from resulting ophthalmia neonatorum. In Great Britain, in 1888, the total number of blind was 23,000, and 7,000 of these were blind from the same cause.

In the scientific sense of the term, every eye is blind which has not the capability of objectively perceiving light. The blindness can involve one eye or both eyes. For practical purposes such a person is blind whose vision is so reduced that he is prevented from following every means of livelihood where the eyes are necessary. The essential fact is his inability to maintain himself and his dependence on others for support. According to Professor Schmidt-Rimpler, all such persons are practically blind, so far as the use of their visual impressions are concerned, that can only count the figures in the nearest proximity to their eyes—numerically expressed at 1-3 m. or 13".

All forms of purulent conjunctival inflammation occur mostly from infection. In the majority of cases of ophthalmia neonatorum the infection is caused by the vaginal secretion of the mother, remaining attached to the eye-lashes and edges of the lids of the infant, during its passage through the vagina. As the child is delivered with closed eyes, very little secretion is apt to enter into the conjunctival sac itself, but as soon as it makes efforts at repeated openings and closures the material can find entrance to the conjunctiva. An infection were possible if the passage of the head were slow, or forceps were used by displacement of the soft parts, and thereby opening the lids. Cases are known of an immediate outbreak of the disease, and in one case there was perforation of both corneæ in consequence of an infection intra-utero, caused by the manipulations of the accoucheur carrying the virulent secretion of the vagina onto the face of the child.¹

Purulent conjunctivitis of new-born infants is not only caused by a virulent vaginal secretion, but a simple catarrhal affection

1. Undoubtedly this was a case of face presentation. King's Manual of Obstetrics says: "In the treatment of face cases avoid rupturing membranes during examinations in early stage, and beware of injuring the eyes with the finger."

accompanying pregnancy would also cause a light form of inflammation. If infection takes place at birth, the disease manifests itself on the second or third day thereafter, the difference depending on the character and the quantity of the secretion which entered the eye. If inflammation sets in later than five days, then infection, no doubt, took place after birth by reason of the dirty manipulations with unclean fingers and sponges of the nurse; but such forms are simple. Inflammation of the other eye takes place in a great many cases, and it is, no doubt, owing to a direct infection from the first eye.

In lying-in and foundling institutions the disease is often carried by the carelessness of the personnel from one nursling to the other. In this way many babies were formerly infected. In the Vienna Foundling Hospital there were from the years 1854 to 1866, 5,616 children sick with ophthalmia, and of these more than 1,400, twenty-five per cent., first obtained the disease in the institution itself. In former years, when the cause of the disease was not yet well understood, it was thought that certain unknown agents aided in the infection, as epidemics of conjunctival blennorrhea were sometimes very active in the foundling institutions; no doubt, the hands and instruments of the accoucheur were the probable sources of infection.

These unknown factors are now well-recognized elements as a cause of virulent ophthalmia neonatorum. The microscope today can demonstrate the presence of the gonococcus-Neisser as the cause of blennorrhea, and where it is not found, no actual blennorrhea exists. The gonococcus, or diplococcus from a thin line of separation appearing to divide it at its centre, is always present in gonorrheal secretion. These microorganisms are characterized by their generally grouping themselves in smaller or larger numbers upon the surfaces of the pus cells, or within their interior.

Purulent ophthalmia in new-born children and the gonorrheal conjunctivitis of the adult, produced by infection from gonorrheal secretion, are both closely related in their anatomical changes. Both present a high degree of inflammation of the mucous membrane, with copious purulent secretion, in both forms the micro-organisms of Neisser being present, these having been identified by Professors Haab and Sattler as identical with such as are found in the secretions of urethral and vaginal gonorrhea. From this typical form of ophthalmia there is also a simple purulent form, in which these morbid germs are entirely absent. We have thus two forms of inflammation in the eyes of the new-born infants: one having more

the character of a simple catarrh, the other presenting all the phases of a virulent, purulent inflammation of the conjunctiva.

In the University Institution of Berlin the per cent. of blennorrhagic children to the total number of new-born, ranged in a period of years from 1830 to 1869, between one per cent. and eight per cent.; whereas in the Charité, also located in Berlin, the cases of blennorrhœa from 1817 to 1879 made up an average of seven to twenty-one per cent. In the foundling hospitals the average number of cases is yet larger :

Prague	1865-68.....	8.6; 13 per cent.
Vienna	1856-66.....	4.0; 31 per cent.
St. Petersburg.....	1830-78.....	5.9; 10 per cent.

But in these last cases twenty-five per cent. can be considered as infected from the other children after entering the institution. Outside of the public institutions ophthalmia neonatorum is seldom found among the educated classes, more often among the poorer people, as cleanliness in all matters is not so strictly observed among them. The condition of the child is often neglected by the midwives, and even the parents are negligent of its care; it is only the severest cases which are brought to the clinic for treatment. Hirschberg, of Berlin, with a material of 21,000 cases of miscellaneous eye diseases, had only 320 cases of ophthalmia thereunder.

Of the dangers attending neglected cases, and especially in practice among the general public, where ignorance of the consequences involved is only surpassed by the methods of treatment employed, which hasten events, failure on the part of the parents to call in a physician, or the nurse to suggest having the eyes of the infant treated, are often the cause of many of the severest forms of ophthalmia, with damage done to the cornea, and the sad results following therefrom. A tabulation of some such cases properly treated and other cases neglected, illustrates this fact quite effectively. Of 100 cases of ophthalmia neonatorum treated at the Cincinnati Hospital in a proper manner, and another series of 100 cases brought to the hospital at different stages of the condition, only fifty-eight of these were free from corneal implications; six were blind in both eyes, and five in one eye. The 100 cases treated methodically all recovered. Hirschberg, in the course of six years, treated 200 cases, among which there were already, when first coming under observation, fifty-five cases of corneal complication and six eyes totally lost (See Table No. 1).

The prophylaxis of blennorrhea neonatorum, or the prevention of purulent conjunctivitis in new-born infants, belongs to the domain of hygiene, and this most important office, if thoroughly conducted under its auspices and well performed, is most often successful in giving happy and thankful results. It was a natural consequence of the supposition that blennorrhea depends for its inception upon infection that the method pursued at the Basel Institution by Professor Bischoff, as early as 1875, was the disinfection of the vagina with carbolic acid solution, and the eyes with salicylic acid; since then many other lying-in hospitals have been using this or other methods to serve the same purpose. To do its full duty, prophylaxis must prevent, as far as possible, infection during birth as well as after birth. During the period of the mother's pregnancy, if there be a catarrh of the vagina, more especially of a purulent character, it must be attended to; where this is not done, thorough disinfection at birth must take place.

Credé, in his first publication on this subject, laid principal stress on the disinfection of the vagina, and after birth cleansed the eyes with boracic acid solution. In Austria the midwives are compelled to disinfect the vagina before birth. Of what importance in itself this act of disinfection has in preventing ophthalmia neonatorum, we are not able from statistics to prove anything, as the disinfection of the eyes takes place at the same time. Today the most attention is devoted to the disinfection of the eyes of the child. The infectious secretion generally enters the eyes after birth; distributed along the lid edges and eye-lashes it soon gets into the conjunctival folds after a few repeated movements of the lids. This can be prevented by cleanliness; even after the most active material has been deposited for a short time within the conjunctival sac, careful cleansing and removal will prevent infection.

The different methods which have been tried are: The simple washing of the eyes with pure water; with this method the number of cases have been slightly reduced by some, but water is not a trustworthy agent when used alone. The cleansing with disinfecting solutions; Credé began his first attempts with a borax solution (1 to 60), but was dissatisfied with his results; others used salicylic acid, chlorine water, but the larger number used two per cent. solutions of carbolic acid, and not stronger. Carbolic acid has a great advantage in the fact of being most constantly on hand, and the preparation ready for the physician's use.

The Instillation of Silver Nitrate.—After Credé met with such

unsatisfactory results in the use of borax solutions, he experimented with different modes of treatment, especially testing the property of silver solutions in varying strength to combat the danger of infection, and came at last to employ the method now mostly used today, and known as Credé's method. He conducts it as follows: After ligation of the umbilical cord the child is transferred to the bath, and with clean water the eyes are cleansed of adhering secretions. Hereupon the child is laid flat, and into each eye, by means of a glass rod, one drop of a two per cent. solution of silver nitrate (ten grains to the ounce) is allowed to fall directly onto the cornea. Other further attention the eyes do not receive.

One would think that such a strong solution of silver would do damage to the eyes of an infant; but Credé, and those who follow his method, say that, in most cases, there is no reaction from the use of it. In some cases hyperemia and some secretion of the conjunctiva was present, but after three days these symptoms disappeared without treatment. In these cases the therapeutical action of the silver solution is regarded as an antiseptic agent, the solution coagulating the albuminous matter present, and entering into chemical combination with it; the effect is more than superficial. It causes an eschar among the upper layers of the conjunctival epithelium, so that if the microorganisms have already obtained entrance, the silver solution will reach and destroy them.¹

Professor of Ophthalmology, Alfred Graefe, at Halle, was one of the first to raise his voice in favor of prophylaxis of the eyes of new-born infants, and in 1878 was successfully using a two per cent. solution of carbolic acid for treatment in his clinic; he also interested his colleague, the obstetrician, Dr. Olshausen, to use his method for antiseptic prophylaxis in his department.

Professor Graefe, although admitting the wonderful results of a two per cent. solution of silver, has grave apprehensions that such a strong concentration upon a healthy and all-succulence-devoid conjunctiva, might lead to diffuse scar tissue upon the surface of the same, or an inflammation of the cornea also take place, owing to the protracted reaction which usually ensues upon such an application.

1. In an article on the Relative Germicidal Value of the So-called Antiseptics, by John E. Weeks, M. D., in the *Medical Record* of August 3, 1899, he says: "Nitrate of Silver. In this salt we have an excellent germicide, the value of which does not appear to be recognized by the profession. Aside from the work by Rutinoff and Miquel, who determined that in the proportion of 1 to 10,000 it arrested putrefactive processes, little has been done with the nitrate of silver in an experimental way. We may assign this salt to a position near the head of the list of germicidal remedies." This explains its great efficiency in the treatment of various purulent affections of the eye, otorrhea, etc.

Every new method of treatment is put to the test by the results obtained. Statistics gathered of the absolute number of observed cases of ophthalmia neonatorum and their per cent., under methods pursued before prophylaxis was employed, and after the use of different antiseptic agents, as employed by different authorities, show varying important differences. These data are of interest in exhibiting results obtained by the use of water, a two per cent. solution of carbolic acid, and by the use of a two per cent. solution of silver nitrate. (See table before prophylaxis and after the use of prophylaxis.) From such facts it will be readily seen that the disinfection of the eyes immediately after birth, and done with care, is a most efficient means to protect the child from the dread effects of blennorrhœa. This should be done in the case of every infant.

A very interesting experiment of Königstein, (an eye specialist of Vienna,) who, arranging his cases into those of a simple catarrh and of blennorrhœa, watched the history of 1,092 infants, which received no treatment; then noted a second series of 1,541 infants, where he used a one per cent. solution of carbolic acid; and in a third series of 1,250 infants, where he used a two per cent. solution of the nitrate of silver. All these observations and experiments took place at one clinic, conducted by the same set of attendants, and the results tabulated by the same individual, so that these observations represent facts, and have scientific worth. Königstein's results as tabulated are :

	New-born.	Blennorrhœa, Per cent.	Catarrh, Per cent.	Total.
Without treatment.....	1,092	4.76	14.50	19.26
One per cent. carbolic acid.....	1,541	1.42	6.00	7.42
Two per cent. silver.....	1,250	0.72	4.72	5.44

In Germany most cases of delivery are conducted by educated midwives; not even among the best families does the doctor appear until absolute necessity requires his management of a difficult case, much less does he appear among the poor. In Sweden, where there is a great deficiency of doctors, the midwives are permitted to use the forceps. To these midwives in Germany and Austria is intrusted the task of following out the strict, printed directions of antiseptic prophylaxis issued by the Government, and the good results achieved thereby are well worth all the necessary extra preparation and care essential to success.

The prophylaxis is more important in general practice, owing to the total number of births among the public being far larger than the smaller number born in institutions. Cases of blennorrhœa or

ophthalmia occurring among the people are always more apt to lead to bad results from neglected and improper treatment.

Upon you, gentlemen, general practitioners, whose work lies among the public, meeting every phase of life as you are called upon to attend at the birth of a child, — upon you devolves the important duty of careful watching and prevention of this dread disease at the births which come under your personal care.

TABLE No. 1.

<i>Institution.</i>	<i>No. of cases of oph. neon.</i>	<i>Corneal Opacity.</i>	<i>Blind-ness one eye.</i>	<i>Blind-ness both eyes.</i>	<i>Per cent. of Injured Eyes.</i>
Charité Berlin Lying-in Hospital.....	213	2	2	1	1.0
Munich Lying-in Hospital.....	133	1	2	1	2.4
Dresden Lying-in Hospital.....	1,378	38	15	4	3.8
Stuttgart Lying-in Hospital.....	538	13	12	1	4.6
Cincinnati General Hospital (first series).....	100	0	0	0	0
Cincinnati General Hospital (second series).....	100	42	5	6	58.0
Vienna Foundling Hospital.....	1,347	112	171	42	21.0
Prague Foundling Hospital.....	300	105	32	7	46.7
<i>Private Clinics.</i>					
Horner.....	108	43	0	0	39.8
Hirschberg.....	200	55	...	6	27.5
Emrys Jones.....	420	72	...	16	17.1

TABLE No. 2.

Author.	Before Prophylaxis.			After Prophylaxis.		
	Total No. of Cases.	Cases of Blen.	In per cent.	Prophylactic Method.	Total No. of Infants.	Cases of Blen. In per cent.
Abegg .....	.....	.....	.....	Pure Water.....	.....	3
Bischoff .....	.....	.....	5.6	Sulleylic Acid.....	.....	3.6
Olshausen.....	550	70	12.6	Two per cent. Carbolic Acid Soln. after ligation of umbilical cord.	137	19
Olshausen.....	.....	.....	.....	Two per cent. Carbolic Acid Soln. before ligation.....	155	6
Krukenberg	1,295	98	7.3	Two per cent. C. A. Soln. before ligation.....	89	11
Königstein	1,002	51	4.3	One per cent. C. A. Soln. before ligation.....	1,541	21
Credé	2,207	314	10.3	Two per cent. Argemum Nitricum 10 gr. to oz.	1,100	9
Königstein .....	.....	.....	.....	.....	1,350	9
Krukenberg .....	.....	.....	.....	.....	708	1
Felsenreich	1,387	49	4.3	1st series.....	3,000	54
Felsenreich .....	.....	.....	.....	2d.....	2,100	21
Bayer	1,105	135	12.3	.....	351	0

TABLE No. 3.

<i>Königstein's Method and Results</i>	<i>Total No. of Infants.</i>	<i>Blen. in per cent.</i>	<i>Outreach in per cent.</i>	<i>Total per cent.</i>
Without treatment.....	1,002	1.75	11.5	19.25
One per cent. Carbolic Acid Solution.....	1,541	1.42	6	7.42
Two per cent. Argemum Nitricum 10 gr. to 1 oz.....	1,250	0.72	1.72	3.44

Society Proceedings.

AMERICAN PUBLIC HEALTH ASSOCIATION.

THE eighteenth annual meeting of this association was held at Charleston, S. C., on the 16th, 17th, 18th, and 19th of December, 1890, under the presidency of Dr. Henry B. Baker, of Lansing, Mich. There was an unusually large attendance at the meeting, nearly every state and territory in the Union being represented, as well as all the Canadian provinces. The Republic of Mexico was represented by Dr. Domingo Orvananos, of the Superior Board of Health of Mexico, and Prof. Jose L. Gomez, of the National School of Agriculture of Mexico. Prominent men from the medical corps of the U. S. Army and Navy were also in attendance. As an indication of the interest which is taken in this association, mention may be made that on the opening day about fifty new names were added to the membership list. Much of the success and pleasure of the meeting were due to the energetic and painstaking efforts of the chairman of the local committee of arrangements, Dr. Horlbeck, the efficient health officer of Charleston.

Made up, as this association is, of the foremost sanitarians of the country, a large number of practical and valuable papers were presented, embracing almost all topics falling within the domain of sanitary science and preventive medicine. The discussion which these various papers elicited was free and spirited and very generally indulged in. Papers relating to the subject of tuberculosis, and all things relating thereto, are at this time very important and fraught with great interest to mankind in general. The first paper relating to this matter was entitled *The Federal District of Mexico as a Suitable Residence for Persons Predisposed to Tubercular Affections, and for the Relief of Pulmonary Consumption*. This paper was written by Dr. Domingo Orvananos, of Mexico. It was translated into English and read by Dr. A. L. Gihon, U. S. N., as Dr. Orvananos does not speak English fluently. The paper was excellently written, and graphically presented the claims of that district. It showed careful study and research, and was fairly bristling with valuable statistics and information.

Dr. L. F. Flick, of Philadelphia, next read a paper on the *Prevention of Tuberculosis*. This paper was largely historical and represented the results of a century's supervision in Italy under

the influence of the preventive laws of the Kingdom of Naples, enacted in 1782. Dr. B. F. Wyman read a short paper on the Prevention of Phthisis. The question of the best climate for consumptives was largely entered into, and the paper incidentally, showed the great advantages of Aiken as a health resort, especially for those suffering from incipient pulmonary phthisis. Dr. Wyman has had fourteen years' experience at Aiken, and his views and opinions should possess considerable value.

Perhaps the most important discussion of the meeting followed the reading of these papers.

Dr. GIBON, of the U. S. Navy, said that something ought to be done to prevent the general expectoration of consumptives on cars, vessels and elsewhere. He hoped that a committee would be appointed to take the matter in hand. He remarked that the real object of the Association was to look after the prevention of the disease rather than its cure. Dr. Kemp, of Brooklyn, an expert bacteriologist, said that the bacilli of tuberculosis were very tenacious of life in their dry state. His own experiments and those of others had shown this, and he believed the disinfection of the sputa the keynote of the situation. Dr. Rohé, of Baltimore, said that if proper preventive measures were not taken at health resorts, it was useless for physicians to send their patients to these places. Prof. Johnson, of Chicago, advised the sending of tuberculous patients to cold and open regions where the bacilli do not flourish. Crowded cities were the worst possible places for consumptives. Dr. Beverely thought that the great mistake of consumptives was not to take up a permanent residence at some health resort. Dr. Ames, of the U. S. Navy, related how the people of Japan got rid of their sputa by carrying sheets of paper in their sleeves, which they used as handkerchiefs. These were afterward destroyed. Dr. Wyman, of the U. S. M. H. S., said something ought to be done to keep out of the country emigrants who have pulmonary troubles. After a protracted discussion Dr. Gihon offered the following resolution, which was unanimously adopted, "Resolved, That a standing committee of five be appointed by the president to formulate and distribute practical prophylactic rules and measures for the prevention of the spread of tuberculosis, especially looking to the protection of the healthy members of the community from tuberculous infection."

A very interesting paper was presented by Geo. T. Kemp, Ph. D., director of physiological and experimental therapeutics at the

Hoagland Laboratory, Brooklyn, N. Y., entitled *Some Original Observations on the Microscopical, Spectroscopical and Chemical Experiments of Black Vomitus as an Aid to Health Officers in Distinguishing between Yellow Fever and Malarial Fever*. The report of Dr. Ashmun, of Cleveland, Ohio, chairman of the committee on the Cause and Prevention of Diphtheria, was an admirable document, teeming with valuable practical information relative to the prevention of this dreaded malady. It would be well if a copy of this valuable report could be placed in the hands of every board of health in the country. Protective Vaccination on Ocean Steamers was very ably presented by Dr. Montizambert, of the Province of Quebec. Dr. J. H. Raymond, of Brooklyn, N. Y., presented two very interesting papers which were illustrated with stereoptican views: one on *The Treatment of Sewage by Precipitation and Saturation*, the other on *The Sanitary Improvement of Stagnant Lakes Near the Seashore*. An original and interesting paper on *Underground Water for Public Purposes* was presented by Dr. P. H. Bryce, of Toronto, Ont. Dr. Jose L. Gomez gave the association some very elaborate and carefully prepared results of many original investigations in the hog-raising sections of Mexico in a paper entitled *Swine Red Disease in Mexico*. One of the most pleasing incidents of the meeting was a visit to the quarantine station at Fort Johnson, in Charleston harbor. For this purpose, the Secretary of the United States Treasury kindly placed at the disposal of the association the services of the United States revenue cutter *Lot. M. Morrill*. This trip enabled all who went to see the many objects of historical interest in and about the harbor, and to see, fully illustrated by the most sanitary and modern appliances, the methods employed at Charleston for fumigating and disinfecting infected ships, clothing, etc. On the return trip, a sumptuous collation was served on the steamer to all present. Another interesting trip was made, on invitation of the Emerson Car Ventilating Co., to the old plantation of Otranto. The cars used on this trip were ventilated by the Emerson appliance, and proved to be objects of great interest to many of the members. The old plantation house is now used as a country club, and here the members were treated to a royal repast of both solid and liquid refreshments. Among the social features of the occasion, perhaps the most important, was the public reception given to the members of the association at the Grand Opera House. Here the members were treated to some choice musical selections

by the orchestra, after which Dr. Horlbeck introduced Dr. J. Somers Buist, of Charleston, who welcomed the Association to the city. He said Charleston was alive to the honor which had been done her in being selected as the meeting place of so distinguished a body. This was a body of scientific men, who, without hope of reward, were working to place truth before the world. They were striving to make system and order, displace ignorance and superstition, and to place before the public the need for health. In closing Dr. Buist paid a glowing tribute to Dr. Robert Koch, of Germany, and spoke eloquently of the great work he was now doing for science.

Dr. Buist was followed by President Baker, who delivered his annual address, which was full of valuable thought and suggestion. The object of the Association, he said, was implied in its name. It was devoted to the advancement of sanitary science and the promotion of public hygiene. Not only, he said, was the whole of this country interested in the work of this association, but so were also the provinces of Canada and the government of Mexico. Dr. Baker referred at some length to what the governments of Germany and Great Britain were doing for sanitation, and for public health generally. He referred in a fitting way to Koch and his great discovery. He discussed the bacilli of diphtheria, pneumonia, and other diseases incident to cold climes, and showed how by the work of health departments of various states and cities, many diseases had almost been wiped out. He argued that the United States should establish a health department of the interior, which was more needed than quarantine. The government should investigate typhoid and mountain fevers, and precautions should be taken against cholera. Measures should be taken to investigate infected localities, and the prevention of disease. He discussed at considerable length inflammatory diseases and their causes and prevention. He spoke at length, too, on the subject of government aid, and said that the constitution gave Congress the right to look after the general welfare of the people, and it could not be better done than by providing for the investigation and prevention of diseases. Political questions, such as free trade and protection, were of small consequence when compared to governmental protection to life and health. Rev. Dr. Vedder and Mr. P. K. Bryan also made eloquent addresses at this meeting. While in Charleston, many members of the association, on invitation, availed themselves of the courtesies of the Charleston Club. An invitation from Dr.

Wyman was extended to the association to visit Aiken, S. C., which is now enjoying great popularity as a health resort, and after the final adjournment many of the members went to Aiken on a special train provided for the purpose, where they spent a couple of days very pleasantly. Buffalo was represented at the meeting by Health Physician W. D. Greene, ex-Health Physician Edward Clark, City Chemist F. P. Vandenberg, and Dr. A. R. Wright. Dr. Montizambert, of Quebec, was elected president, and Dr. Thos. F. Wood, of Wilmington, N. C., first vice-president. The secretary and treasurer, and other officers were all reelected. Buffalo's representatives fared pretty well so far as the appointment on committees was concerned. Dr. Greene was placed on the committee on the Cause and Prevention of Diphtheria, Dr. Vandenberg on the committee on the Pollution of Water Supply, and Dr. Clark was elected a member of the executive committee, and was placed also on the committee on the disposal of Garbage and Refuse of cities. It was voted to hold the next meeting of the association at Kansas City, Mo., in November, 1891. E. C.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON ORTHOPEDIC SURGERY.

STATED Meeting November 21, 1890.

V. P. GIBNEY, M. D., Chairman.

DR. BEELY'S APPARATUS FOR MEASURING THE THORAX.

Dr. N. M. SHAFFER exhibited one of these instruments which had been presented to him while he was in Berlin, by the inventor, Dr. Beely. A somewhat similar apparatus has been called by Dr. Nebel, a kyrtograph. The apparatus consists of a series of narrow parallel steel bars, placed closely together, and sliding in a rectangular metal frame. Each bar terminates in a blunt point, near the end of which, on the under surface, is a metallic point or stylus. This arrangement of bars looks not unlike a huge comb. On bringing the pointed ends against the chest, or any similar object having an irregular outline, the bars adjust themselves in the frame, so that the pointed ends form an outline identical with that of the object against which they were placed. A simple cam movement then clamps them in this position. The instrument is next laid upon a piece of paper, resting on a sheet of felt, and the points on

the under surfaces of the bars are made to puncture the paper, by passing a small roller over all the bars successively. In this way, the desired outline is recorded on paper as a series of small punctures, about one-fifth of an inch apart. When taking a tracing from a patient while standing, an erect position is secured by means of a plumb-line fastened to a belt, which is buckled around the body. In order to secure still greater accuracy, the instrument is provided with a spirit level. The exact level at which this transverse tracing of the chest is taken, may be marked with nitrate of silver, so that tracings taken at different times may be readily compared. With the patient in the prone position, the instrument may be used; but a longitudinal tracing, as of the spinal column, with the patient erect, is not within the contemplated scope of the instrument.

Dr. SHAFFER said that he had made several tracings with this instrument, and he had been very favorably impressed with its action and accuracy.

Dr. JOHN RIDLON said that he had seen Dr. Beely using it with the patient in the prone position, and that he had understood that its action was only satisfactory when employed in this way. At the Berlin congress, Dr. Nebel had exhibited a much cheaper, but less accurately made instrument, constructed on the same principle. A series of round rods were placed parallel to each other, and made to slide through a large round bar. The small bars terminated in buttons, which were applied to the chest. The outline was then transferred to paper by laying the machine on the paper, and passing a pencil along the buttons.

Dr. A. B. JUDSON admired the mechanical features of the instrument, but thought that such tracings of cases of lateral curvature were of but little value, in view of the fact that the changes in contour occurred from day to day, as a result of differences in the general tone of the patient.

A CASE OF SUPPOSED EVACUATION OF A PSOAS, OR LUMBAR ABSCESS
THROUGH THE VAGINA.

Dr. SAMUEL KETCH presented such a case. A child, five and three-quarter years of age, of healthy parentage, and having a good family history, was admitted to the hospital on October 23, 1890, with the history of a fall six or eight weeks prior to her admission. Two weeks before she was presented for examination, she was first noticed to walk peculiarly, and she complained of "pain in her

feet." She was thought to be suffering from hip-joint disease by her attending physician. At the time of the examination, her general condition was fair, and there was no pain, and the motions at the hip-joint were normal with the exception of a slight limitation of extension on the right side, when the patient was in the prone position. Close examination revealed a small kyphos in the lower lumbar region; the right hip was prominent and relatively larger, and there was a feeling of fluctuation on that side. There was a discharge of pus from the vagina. The case was of interest, both on account of the unusual mode of evacuation of the pus, and because of the symptoms which had led to the diagnosis of hip-joint disease.

Dr. SHAFFER had seen the case just reported. He had met with cases where the abscesses of Pott's disease opened into the rectum, vagina, and bladder; and in one case of disease in the dorso-lumbar region, which had extended over a period of about twenty years, pus was discharged from the bladder at intervals of a few months, accompanied by the usual symptoms of acute abscess formation. The cases in which the abscess had opened in these unusual situations, had all done well, and he attributed this to the valvular opening through which the pus was discharged. In one of his cases, an abscess was found pointing into the rectum, and was purposely evacuated at this point by means of a trocar. The result had been extremely satisfactory. A similarly favorable prognosis could not be given where abscesses ruptured into the lungs. He had seen several of these cases, and in one now under observation, which he considered unique, a boy with mid-dorsal disease, suffered at intervals from fever, accompanied by the expectoration of pieces of the cancellous portion of bone.

Dr. R. H. SAYRE said that anatomical considerations would lead one to expect that owing to better drainage, abscesses opening into the alimentary canal would pursue a more favorable course than those which ruptured into the lung. He recalled a case where an abscess, situated on each side of the vertebræ, suddenly enlarged and caused fatal asphyxia. The autopsy showed that "a saddle-bag" abscess was situated at the bifurcation of the trachea.

Dr. J. K. YOUNG, of Philadelphia, said that he had recently seen a case of lumbar Pott's disease, in which the abscess had been evacuated through the vagina, and also through the abdominal walls. It had pursued a favorable course.

Dr. THOMAS H. MANLEY had once treated a case of abscess in

the mid-dorsal region, where evacuation had occurred through the umbilicus. It made a good recovery.

Dr. AGRAMONTE suggested that the exact condition present in Dr. Ketch's case could not be affirmed until the vaginal discharge had been examined for gonococci.

THE CHAIRMAN thought that such an examination was highly important, and suggested that search should also be made for the opening through which the pus was discharged.

Dr. KETCH, in closing the discussion, said that he was aware that the report of the case was somewhat premature, and had only been presented at the request of the Chairman for clinical material. He had not been able as yet to make the examinations suggested; but the rational symptoms and the clinical history of the case seemed to warrant the position which he had taken. In an experience of thirteen years at the Orthopedic Dispensary, he had never before met with such a case, and had only seen one case in private practice, and in this one, Dr. L. A. Sayre had verified the condition. In this case there was a favorable termination.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Reported by WILLIAM H. BERGTOLD, M. D., Secretary.

THE regular monthly meeting was held on Tuesday evening, November 4th, at 8.30, in the parlors of the Hotel Iroquois. The President, Dr. A. A. HUBBELL, in the chair.

Present—Drs. Callahan, Wyckoff, Bartlett, Brodt, Jones, Thoma, Clark, Hartwig, Hubbell, Bayliss, Millring and Goltra.

The minutes of the previous meeting were read and, after corrections by Dr. BARTLETT, were approved.

The name of Dr. Devan was proposed for membership. Dr. E. A. Smith was elected to full membership.

It was moved, seconded, and carried that the essayist's paper be postponed until the December meeting.

Under voluntary communications, Dr. M. HARTWIG reported a case of abscess of the liver, in which he had adopted a novel method of treatment; the patient refused any appropriate operation, and the doctor then drained the abscess as follows: he thrust in a trocar and cannula, pulled out the trocar, and in its place inserted a catheter, which fitted snugly to the cannula, and withdrew the cannula, leaving the catheter to act as a permanent drain.

A large amount of pus was evacuated at once, and more continued to appear for several days. The patient is now well on to recovery, though there is still a slight discharge. The tube was withdrawn and reinstated on several occasions after operation.

Dr. BARTLETT thought that the idea and method were unique and novel. It seemed in this case to have been very satisfactory. He asked Dr. Hartwig what he considered some of these diagnostic signs of hepatic abscess, especially if incipient.

Dr. BERGTOLD thought that Dr. Hartwig was to be congratulated on his case, for he had met the indications very well.

Dr. CLARK asked if Dr. Hartwig would use the same method in other cases.

Dr. HARTWIG, in closing the debate, said that he himself was anxious about the motion of the liver displacing the drainage-tube, and in this case he believed that adhesions had formed which prevented any wide motions. The liver tissue, also, does not grasp a catheter as would muscle, and this is a danger in using this method. If he operated similarly again he would not empty the sac all at once, as he did this time. He left the tube in six days, and then gradually withdrew it.

Some characteristic symptoms of hepatic abscess he considers as follows :

1. Enlarged liver.
2. Localized pain.
3. Fever, may be variable ; is more variable in multilocular abscesses.

Icterus is wanting in many cases. He mentioned a case where at the *post mortem* the liver was found to contain many minute abscesses, in the centre of each being a minute gall stone. In a normal liver we find an even line of dullness, while in abscesses or echinococcus this is irregular ; finally, the last and one of our best diagnostic points is the use of the hypodermic needles, with which we should always search for pus ; it never does any harm and is of very great usefulness.

Dr. BARTLETT mentioned his method of treating dysentery by injections of bichloride 1-8000, using large and copious enemata. He reported, a number of years ago, about sixty cases treated according to this plan, and when he had good success.

His cases now number about 160, and he sees no reason for abandoning it. Children do not bear it so well, as we often have

to chloroform them, in order to exhibit the enema. In order to be effectual the injections should be carried high up, while the patient lies on the right side, with the hips elevated. The effort should be to distend the color as fully as possible.

He has used the method with some cases of typhoid with good effect; here it acts both mechanically, in carrying away deleterious matters, as ptomaines, and antiseptically.

Dr. HARTWIG thinks that in typhoid, these clysters do not reach the seat of disease, and that the whole alimentary tract could better be made aseptic by the use of calomel. He thinks, however, that the method is useful as an aid, and should be used when practicable.

Dr. CALLAHAN said that he knew of a case of dysentery of eleven years' duration, which was cured by the use of bal. bichloride 1-8000 enemata.

Clinical Report.

FISTULA OF THE PAROTID GLAND.

BY A. L. BENEDICT, M. D., Buffalo, N. Y.

ON October 27th, A. B., a strong, healthy-looking laborer, presented himself with marked lesions of secondary syphilis, from an exposure three months previously. There was an abscess over the ramus of the inferior maxillary, which had been opened a few days before he consulted the writer, but in which pus had again collected, though the incision—a longitudinal one—had scarcely healed. The original wound was reopened and slightly enlarged, when a considerable quantity of pus was evacuated.

The wound was packed with zinc oxide gauze and covered with a light dressing. The patient was placed upon the following prescription:

R.—Hydrargyri chlor. corros.....	20
Potassii iodidi	10.
Syr. sarsaparillæ co.....	100.
Aquam ad.....	200.

S. 5 c. c. P. C. [Teaspoonful after meals.] This medicine was replaced later by pills of mercurous iodide .03, three times daily.

The abscess discharged freely for several days when, the pus

abating, it became evident that a salivary fistula remained. The patient stated that there was a sufficient supply of saliva and, on drying the mucous membrane in the vicinity of the orifice of Steno's duct and touching the tongue with vinegar, the side of the mouth became moist. Moreover, the upper portion of the external wound had healed and the fistula was slightly below the line of the duct, (from the lower part of the lobe of the ear to a point midway between the ala of the nose and the corner of the mouth,) and farther back than the main duct usually extends. From physiological and anatomical reasons, therefore, it was decided that the fistula was from the gland substance and was not due to occlusion of the duct.

On December 1st, cocaine was injected and the edges of the old wound freshened by the bistoury and curved scissors. Three small catgut sutures, about one-eighth of an inch apart, were introduced and above and below the ends of the wound, rubber adhesive strips were applied so as to approximate the tissues as much as possible, and to relieve all strain upon the sutures. A figure-eight head and chin bandage was put on to prevent movement of the jaw.

The patient was seen daily, but it was thought best not to remove the sutures as soon as is usually done in facial surgery. On December 4th the knots were cut off short, and on the next day the remnants of the sutures were removed. Thus far all had gone well, but on December 6th a swelling of the gland occurred and saliva oozed from one or two suture-holes and through part of the original wound. A temporary dressing of iodoform ointment on lint was applied, and the patient directed to return the next day, when the distension was found to have nearly disappeared, and there was only slight oozing from the wound and suture-holes. The ointment dressing was therefore continued and the swelling diminished gradually and the oozing correspondingly, although for some days the patient, not understanding directions, persisted in pressing the gland to force out the fluid.

On December 13th, what little distension remained had localized itself at a point nearly over the angle of the jaw and seemed to be pointing, the skin presenting a purplish discoloration. An opening was accordingly made, evacuating several drops of clear fluid, undoubtedly saliva, which showed under the microscope red-blood corpuscles, a moderate number of leucocytes and a few epithelial cells. Three days later this opening, as well as the original one, had entirely healed and the swelling had nearly subsided. Iodine

ointment was substituted for the iodoform ointment and, on December 22d, the patient stated that the fistula had remained entirely closed and the swelling was barely noticeable. Meanwhile, the general condition of the patient had been much improved and the pills were withheld for a few days on account of the beginning of mercurialisin.

Progress in Medical Science.

LARYNGOLOGY AND RHINOLOGY.

CONDUCTED BY

FRANK HAMILTON, POTTER, M. D.,

DIAGNOSIS AND THERAPEUTICS OF CANCER OF THE LARYNX.

BUTLIN, OF LONDON, (*Journal of Laryngology and Rhinology*, Nov., 1890,) presented a paper on this subject before the Tenth International Medical Congress. He accepts the division proposed by Krishaber into extrinsic and intrinsic cancers. Extrinsic are those neoplasms which are situated on the arytenoid cartilages, ary-epiglottic folds, epiglottis and in the sinus pyriformis. Intrinsic are those situated on the true and false ligaments, ventricles and in the sub-glottic space. This division is of great practical value. Whilst the extrinsic forms have a rapid and bad progress, the intrinsic growths are limited for a longer period to the interior of the larynx, and have no great tendency to affect the lymphatic glands. The operation of total or partial extirpation of the larynx must only be practised in cases of intrinsic carcinoma, for only in such cases are successes observed. In one hundred and two collected cases of intrinsic cancer are twenty-eight cases of thyrotomy, twenty-three of partial, fifty-one of total extirpation, with three, seven, and sixteen deaths respectively from shock, septicemia, or *Schluck-pneumonie*. The author regards those cases as cured which last longer than three years without recurrence. The total results, then, so far as cured cases are concerned, are that fifteen patients were alive and free from disease, or died of some other disease than cancer, at periods of from three to twenty years after the last operation. Of the results of operations for recurrent disease, but little that is good can be said. The operations proved fatal in more than one of the cases, and not one of the pati-

ents received decided benefit. With regard to the choice of operation in individual cases, the smallest operation consistent with the widest excision of the disease, and the removal of a wide area of surrounding tissues, should be performed. Intralaryngeal operations, in spite of the good results obtained by B. Fränkel, can only be performed in few cases, because usually the cancer is more extensive than can be seen by the laryngoscope.

ATROPHIC RHINITIS.

In our last report we called attention to some of the undecided questions in connection with this disease. We now present the conclusion of Seifert of Würzburg (*same*) as perhaps the latest contribution to the subject. In forty-nine cases of rhinitis atrophicans simplex the author observed only atrophy of the inferior turbinateds, whilst the middle turbinateds were hypertrophic. There was no fetor or formation of crusts. The same process existed in the pharynx as in the nose. In four cases the author examined pieces of the middle turbinateds, and found cylindrical or cuboidal epithelial-celled infiltration of the uppermost regions of the mucous membrane, and in the deeper parts hypertrophy of the fibrous tissue. In forty-five cases of the fetid form the lower turbinateds were also atrophic, and the middle turbinateds thickened. Tuberculosis or syphilis were rare. In slighter cases the epithelium was cylindrical, sometimes cuboidal, and in severe cases there was only plaster-epithelium, infiltrations of the glands or atrophy of these latter. The author believes in consequence of his microscopical examinations, that the slight and the severe forms are chronic catarrhs with degenerative alteratives of the mucous membranes. The fetor is the consequence of putrescence of the secretions.

THE ANATOMY OF THE NASAL ERECTILE TISSUE.

J. HERZFELD, Berlin, (*Arch. J. Micros.* ; Anat., Vol. XXXIV., p. 197,) in a contribution upon the anatomy of the erectile tissue of the nasal mucous membrane, draws the following conclusions in relation to it : *a.* The erectile tissue of the nasal mucous membrane is rich in organic muscle. This does not lie free in the areolar tissue of the erectile body, but, as in other situations, forms the tunica media of the arteries and veins and, further, lies closely packed about the lacunæ of the erectile body.

b. In the areolar tissue of the erectile body there are a number of elastic fibres.

c. The turbinate bone is spongy, containing marrow. The erectile tissue does not extend into the bone, but veins come from the bone, and anastomose with the veins of the periosteum and the outlet channels of the erectile tissue.—*Archives of Otolaryngology*.

THE DEVELOPMENT OF THE NASAL CAVITY AFTER BIRTH.

DISSE, J., of Berlin, (*Arch. f. Anat. u. Physiol.*, anat. Atth., Suppl. Band, p. 29, 1889,) has investigated this important question. The material studied comprised the skulls of twenty-six children, and twelve adults. The point chiefly considered in the investigations was the question why it is that difficulty in breathing—and, in consequence of this threatening symptoms from want of air—occurs so often under certain conditions in children, and so rarely in adults. The results were as follows: The structure of the nasal cavity in infants and children differs considerably from that in adults. The cavity is low in the new-born; it develops downward, and thus the olfactory region is removed from the floor of the cavity. The respiratory region increases in breadth and height. While the whole nasal cavity increases two and a half times in size, the respiratory region alone increases three times in its growth from birth up to the state of complete development. The increase in width during the same period is still more considerable.—*Archives of Otolaryngology*.

THE RHEUMATIC AND GOUTY DIATHESIS AS MANIFESTED IN DISEASES OF THE THROAT.

ROBINSON, of New York, (*New York Medical Record*, Dec. 6, 1890,) in an article upon this subject, first describes the conditions of the throat that may be found in persons of the rheumatic diathesis and then reviews the treatment of these conditions. On the latter point he states that there is a rational basis for the treatment of these cases. In the first place the blood is subalkaline from retention of the excrementitious substances which should normally be expelled. In the second place the aliments taken as food are not properly oxidized and do not, therefore, take forms like urea, which are soluble and easily eliminated. Two objects, therefore, must be kept in view: I. The depuration of the blood. II. The increased oxidation of alimentary substances introduced into the

stomach. The first object should be attained by the use of alkaline diuretics, by purgatives, by increasing eliminations through the skin, which can be accomplished by exercise, baths, friction. The second object must be attained by the use of iron, oxygen—breathing fresh, pure air. Among the alkaline diuretics the natural Vichy water is one of the best. Among the purgatives are recommended small doses of calomel, podophyllin, and Carlsbad Sprudel salts, dissolved in warm water or in the Sprudel water itself. Under certain conditions the Turkish baths, combined with exercise and friction, are of especial value.

Iron as the main carrier or oxygen to the economy should be given in small doses, frequently repeated and continued for a long time. Diet must be carefully regulated and particularly the excessive use of the albumenoid or starchy foods must be prevented. The internal use of the French sulphur waters, especially those of Aix-les-Bains in Savoy, have unquestionably benefited some patients and are advised, but those of Sharon and Richfield in this country are to be avoided. They probably contain a large proportion of the insoluble salts of lime, and these, instead of favoring the elimination of the gouty products, cause their retention. Colchicum and its alkaloid colchicine are also advised in properly selected cases.

For the local treatment in the large majority of cases soothing sprays and inhalation are to be used and the astringent solutions avoided. Alkaline sprays with carbolic acid, thymol, menthol and warm inhalation with benzoin and fir-wood oil are often of great benefit. The latter should be given only at night, as, if given the day, they tend to increase the congestion and sensitiveness on account of the atmospheric changes to which the patient is of necessity exposed. Inhalation and pulverizations of sulphur water, together with pine needle extract, have also been found of great value.

A NEW METHOD OF RAISING THE EPIGLOTTIS.

PRESTON (*Allgemeine Wiener mediz. Zeitung*, No. 13, 1890,) describes a method of raising an overhanging epiglottis, which, from its simplicity, will at once commend itself. He takes a laryngeal probe and bends its lower extremity laterally to the extent of one and a half centimetres. This is then passed along the dorsum of the tongue in such a manner as to depress the median glosso-

epiglottic fold. This will raise the epiglottis so as not only to expose the vocal cords in their entire length, but also the lower surface of the epiglottis itself. This manipulation causes but little irritation, and can be endured during an ordinary laryngeal operation.

Correspondence.

*Dr. H. U. Williams gives a Synopsis of the Mütter Lectures
Delivered in Philadelphia by Dr. Roswell Park.*

Editors Buffalo Medical and Surgical Journal :

It has occurred to me that the profession of Buffalo and vicinity will be interested in an account of the Mütter lectures, which are being delivered this Winter by Dr. Roswell Park.

Dr. Mütter, of Philadelphia, left, by his will, a sum of money to maintain a course of lectures upon some topic relating to surgical pathology. They are given every third year. The first six of Dr. Park's papers have already been read at the building of the College of Physicians, before a large attendance of the medical men of this city, beginning on the evening of December 4th.

I. The first portion was introductory, sketching the progress of surgical pathology, especially as relating to the study of microörganisms, and eulogistic of the scientists who have achieved the brilliant results of recent times in this direction.

A brief account of inflammation followed. Particular attention was given to the granulomatous form, and much stress was laid upon the influence of constitutional tendency towards it. The phenomena of thrombosis were treated of as being closely connected with inflammation. Ptomaines and leucomaines were shown to have a powerful influence upon the blood, and to be partly responsible for the alterations seen in it after death by the infectious diseases.

Much interest was found in the study of traumatic anemia, especially in the practical bearing of the observations of Mikulicz. A standard of 100 per cent. of hemoglobin was established by examination of blood from healthy young men. This standard was discovered not to be attained in old age, in childhood, nor in females. It was also determined that the greatest reduction consistent with life was to about twenty per cent. It was the opinion

of Mikulicz that many deaths after operation are from oligochromemia. It was considered possible that estimation of the amount of hemoglobin in a patient might furnish a pretty accurate indication as to whether or not an operation could be borne.

At the same time, authority was given, showing one-fifth of the body to be anaërobic. Metabolism was none the less regarded as taking place in all parts. This led to a discussion of the products of cell activity in the body, and their resemblance to those of microorganisms. A ptomaine was defined as the product of cells introduced from without, and as especially connected with putrefactive change; a leucomaine, as the result of the destruction of albuminoids by the cells of the living organism. Cultures were exhibited showing the formation of ptomaines by Poehl's test, (.05 per cent. perchloride of iron, mixed with gelatine, staining occurring at line of contact). A classification and list of ptomaines, with the origin of each, were given.

All this was preparatory to the subject proper of the course,—the surgical infectious diseases. Predisposition to infection was discussed, and illustrated by the immunity of certain animals to particular bacteria, and, in the same connection, the strongly resistant properties of some tissues and organs, and comparatively feeble of others.

The lecture closed with a consideration of embolism, general or local depression of vitality, inflammation, cold, and injury as predisposing to infection.

II. The second lecture continued this subject. The point of inoculation was shown to be of much importance. Organisms that might thrive if introduced into certain tissues, would die in some others. The pyogenic cocci were said to grow best in cellular connective tissue. Diabetes has long been known to dispose to suppurative inflammations. Explanation was offered in the fact that the Staphylococci are favorably influenced by grape sugar.

In relation to susceptibility it was further stated that a sufficiently large amount of virus might affect a comparatively insusceptible animal.

The effect of one bacterium on the growth of another was declared to depend on what the two forms were. Obviously an aërobic colony might foster an anaërobic. But some species were inimical to others, as the micrococcus of erysipelas to the bacillus of anthrax.

The question of an exact definition for the term pus was elab-

orately discussed. Virchow's and Cohnheim's views in regard to inflammation were expounded, and a middle ground between them advised. Metschnikoff's doctrine of phagocytosis was reviewed. It was admitted that simple irritation might result in an exudate closely resembling pus, and that similar discharges have daily been observed from aseptic wounds; furthermore, that the pus of cold abscesses was often destitute of microorganisms, though they had probably been present at an earlier period. Experiments were cited in which cadaverin was injected into the tissues of lower animals. A high degree of inflammation followed the irritation, and an exudate, similar to pus, but devoid of bacteria. Nevertheless, it was decided that the microorganism should be regarded as an essential feature of true pus. For pus-like exudates, not due to bacteria, the term *puruloid* was suggested; and *archepyon*, for pus such as that from cold abscesses, whose microbes had been destroyed in their own product. *Pyophylactic* was offered as a substitute for *pyogenic*, referring to the membrane lining abscess cavities, as being more expressive of its true function.

III. The third lecture was given up to a description of the pyogenic organisms. The terms, obligate and facultative, were defined as referring to the invariable or occasional production of pus respectively. The following list of pyogenic microorganisms was given: Obligate.—(1). *Staphylococcus pyogenes aureus*, (2). *S. pyogenes citreus*, (3). *S. pyogenes albus*, (4). *S. cereus albus*, (5). *S. cereus flavus*, (6). *S. flavescens*, (7). *S. pyosepticus*, (8). *Streptococcus pyogenes*, (9). *Bacillus pyocyaneus*, (10). *B. pyogenes fetidus*. Facultative.—(1). *Gonococcus*, (2). *Pneumococcus* (of Fränkel), (3). *Pseudopneumococcus*, (of Passet), (4). *Micrococcus pyogenes tenuis*, (5). Rosenbach's oval coccus, (6). *Bacillus mallei* (of glanders), (7). *Vibrio septique* (of malignant edema), (8). *Bacillus tuberculosis*, (9). *B. tetani*, (10). *B. of typhoid fever*, (11). *B. anthracis*, (12). *Micrococcus tetragonus*, (13). *Actinomyces*, (14). *Aspergilli* (of several species). As to the following there seemed to be some question: *Bacillus gangrenæ*, *Micrococcus fetidus*, *M. of Delhi boil*, *Amoeba of dysentery*.

The properties of these bacteria were treated of in too much detail to admit of condensation. The status of the coccus of erysipelas was regarded as somewhat doubtful. Cerebro-spinal meningitis was stated to be caused by a number of different forms.

IV. The fourth evening was devoted to the study of sepsis. In connection with it the following conditions were considered:

(1). Surgical fever,—the direct consequence of the injury, and not due to infection. (2). Intestinal toxemia,—poisoning by ptomaines or leucomaines, developed by bacteria in the alimentary canal, or as a result of derangement of the digestive processes. (3). Sappremia,—ptomaines absorbed from some cavity, bacterial growth not extending into the tissues, as, decomposition of clots in the puerperal uterus, or between the flaps of an amputation stump. (4). Septicemia,—an extension of the last form, the microorganisms having invaded the contiguous structures. (5). Pyemia,—further progression by an infective embolic process, with the formation of multiple abscesses.

The means of protection possessed by the body were found to lie in the fact that highly albuminous liquids retard the growth of microbes, in the property of phagocytosis, and in the peculiar preferences of some bacteria for certain tissues, while not thriving in others.

Ptomaine poisoning, such as intestinal toxemia, already existing, favored the development of microorganisms. Laboratory experiments were described, showing remarkable variations from clinical results. Cocci, injected into the circulation in healthy animals, usually failed to develop, even if some wound were made, and often when directly applied to it. Recovery from the wound took place in some cases before there was time for their growth. The query was made: "What kind of a local injury, then, is needed?" It was suggested that perhaps too much importance had been attached to the bacteria alone.

V. Tetanus was the topic of the fifth lecture, being preceded by a consideration of tetany as preparatory to it. Tetany was described as a spasmodic condition of nervous origin, usually manifested in the muscles of the face and arms, less commonly in the legs, consciousness seldom being lost, not being connected with infection or suppuration, and sometimes fatal in its results. Exposure, intestinal irritation, and other causes were mentioned, but its chief interest was found in relation to thyroidectomy. Of late years many cases of tetany have been reported as following this operation for the relief of goitre. Apparently, in such instances, tetany took the place of myxedema. Curious discrepancies were discovered in the proportion of cases of tetany and myxedema occurring in the hands of different surgeons.

Experiments on lower animals showed that loss of the thyroid gland usually caused tetany in carnivora, but not in herbivora.

Transplantation of the thyroid to the peritoneum was successful a few times in averting tetany.

Tetanus was then taken up, its causes first being considered. While it usually followed a wound, preferably lacerated, yet solution of continuity on the surface was not absolutely necessary, instances having been known where it ensued upon dislocation and contusion. Circumstances were cited that sometimes operate as causes,—for instance, a hot climate. A large proportion of cases occurred among those working about horses. Tetanus hydrophobicus and neonatorum were regarded as true tetanus.

It has been within the last ten years that the microbe of tetanus has been isolated by Nicolaier, and carefully studied by Kitasato. It was described as an anaërobic bacillus, having spores that are extremely resistant, withstanding five per cent. carbolic for ten hours. Similar organisms were discovered in the soil, explaining the so-called "telluric" origin of tetanus.

Dr. Park believed them to flourish in the vicinity of horses. Remarkable difficulty was encountered in finding the bacillus after it had been introduced experimentally into lower animals, even in the neighborhood of the wound. None the less, tetanus developed in spite of cauterization or excision of the structures about the point of inoculation. A tube was exhibited, showing a colony of the bacilli flourishing beneath the surface of the culture medium.

Tetanine and tetanotoxine were mentioned as alkaloidal substances, which have been isolated from cultures of the fungi. The symptoms produced by them were like those of tetanus, but were only manifested after doses so large that some more virulent poison must also be supposed to exist.

VI. The study of peritonitis was prefaced with reports of experiments showing the healthy peritoneum capable of absorbing considerable amounts of fluid. Furthermore, comparatively large numbers, even of the pyogenic cocci could be disposed of. This would not obtain, however, if a certain limit were passed. Departures from the normal state might overcome the resisting power: as, for instance, presence of ascitic fluid, which furnished a good culture medium. Obstructions to absorption, presence of blood clot, the action of irritants, and local injury were mentioned as among the conditions permitting the growth of bacteria. In laparatomies, microorganisms were supposed always to enter the peritoneum, but under normal conditions they should be destroyed.

The classification of the different forms of peritonitis accepted was: aseptic, purulent (chiefly from staphylococci or streptococci),

putrid (mixed infection), and specific (including tubercular and gonorrheal). It was questioned whether a purulent peritonitis could follow pure gonorrheal infection.

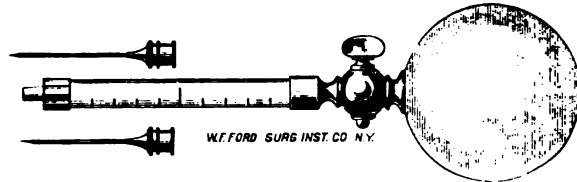
A brief account was then given of the means employed for learning the powers of antiseptics, detailing, in particular, the methods used in Koch's laboratory. A large number of substances have been tested there, determining the strength of solution and time necessary for them to operate, their action on different microbes, and their poisonous effects upon animals. The antiseptic has yet to be found that will not kill the human organism in one-fifth or one-fourth the strength required to destroy bacteria in it.

Dr. Park stated that he had tested the new antiseptic, pyoktannin, after Koch's method, and found neither the yellow nor the blue reliable as antiseptics, although possessing this property in some degree, as all the aniline dyes probably do.

The remaining four of Dr. Park's lectures will not be read for a number of weeks.

HERBERT UPHAM WILLIAMS.

New Instruments.



KOCH'S SYRINGE.

Koch's Syringe for Hypodermic Injections, an illustration of which we present herewith, is likely to be in demand, not only for the use of his anti-tubercular treatment, but in other conditions for which hypodermic medication is indicated. It has the advantage over the piston syringe of being capable of absolute cleanliness. The solutions used come into contact only with the glass measuring tube and the metallic needle, and these can readily be rendered aseptic with heat and absolute alcohol. Instead of a piston, a rubber ball furnishes the means for expelling the solution, and a stopcock prevents any pressure upon the contents until everything is adjusted and ready for the injection.

Stoddart Brothers, Surgical Instrument Specialists, of 84 Seneca street, Buffalo, N. Y., are prepared to furnish the syringes at the net price of \$2.50. Attention is called to their advertisement on page XXIV. of the advertising columns of this JOURNAL.

BUFFALO MEDICAL AND SURGICAL JOURNAL

A MONTHLY REVIEW OF MEDICINE AND SURGERY.

EDITORS:

THOMAS LOTHROP, M. D. - - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed
to the editors : 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXX.

FEBRUARY, 1891.

No. 7.

Editorial.

THE KOCH SECRET ANNOUNCED.

LAST week (Jan. 15th) the press despatches contained the purport of Professor Koch's communication, revealing all he then himself knew about the mysterious liquid that has made his name a household word during the last few weeks.

According to this account the material that has been expected to accomplish so much for the wasted consumptive, consists of an extract from a pure culture of the tubercle bacillus, by means of a forty to fifty per cent. dilution of glycerine. Professor Koch does not know, so he announces, just what the nature of this active principle is, but he proceeds to detail the methods by which he reached his conclusions as to its efficiency in the arrest of tuberculous processes. He says if a healthy guinea-pig be inoculated with the pure cultivation of German culture of tubercle bacilli, the wound closes over with a sticky matter and appears to heal promptly. After ten to fourteen days a hard nodule presents itself which, soon breaking, forms an ulcerating sore, which continues until the animal dies.

On the other hand, if a tuberculous guinea-pig is inoculated, the first or second day thereafter the place of injection becomes hard, assumes a dark color, which spreads to the neighboring parts, attaining, usually, a diameter of .05 to 1 centimeter. In a few days more the skin becomes necrotic and finally falls off, leaving a flat ulceration, which usually heals rapidly and permanently.

We now quote at length from the communication itself :

Thus the injected tubercular bacilli quite differently affect the skin

of a healthy guinea-pig from one affected with tuberculosis. This effect is not exclusively produced with living tubercular bacilli, but is also observed with the dead bacilli, the result being the same whether, as I discovered by experiments at the outset, the bacilli are killed by a somewhat prolonged application of a low temperature or boiling heat, or by means of certain chemicals.

This peculiar fact I followed up in all directions and this further result was obtained, that killed pure cultivations of tubercular bacilli, after rinsing in water, might be injected in great quantities under a healthy guinea-pig's skin without anything occurring beyond local supuration. Tuberculous guinea-pigs on the other hand are killed by the injection of very small quantities of such diluted cultivations. In fact, within six to forty-eight hours, according to the strength of the dose, an injection which is not sufficient to produce the death of the animal may cause extended necrosis of the skin in the vicinity of the place of injection.

If the dilution is still further diluted until it is scarcely visibly clouded, the animals inoculated remain alive, and a noticeable improvement in their condition soon supervenes. If the injections are continued at intervals of from one to two days, the ulcerated inoculation wound becomes smaller and finally scars over, which otherwise it never does; the size of the swollen lymphatic glands is reduced, the body becomes better nourished, and the morbid process ceases, unless it has gone too far, in which case the animal perishes from exhaustion.

By this means the basis of curative process against tuberculosis was established. Against the practical application of such dilutions of dead tubercle bacilli, there presented itself the fact that the tubercle bacilli are not absorbed at the inoculation points, nor do they disappear in another way, but for a long time remain unchanged and engender greater or smaller suppurative food. Anything, therefore, intended to exercise a healing effect on the tuberculous process, must be a soluble substance which would be lixiviated to a certain extent by the fluids of the body floating around the tubercle bacilli and be transferred in a fairly-rapid manner to the pieces of the body, while the substance producing suppuration apparently remains behind in the tubercular bacilli or dissolves but very slowly.

The only important point was, therefore, to induce outside the body the process going on inside if possible, and to extract from the tubercular bacilli alone the curative substance. This demanded time and toil until I finally succeeded, with the aid of a forty to fifty per cent. solution of glycerine, in obtaining an effective substance from the tubercular bacilli. With the fluid so obtained I made further experiments on animals and finally on human beings. These fluids were given to other physicians to enable them to repeat the experiments.

Professor Koch thinks the experiments made by others bear

him out in his claims, viz., that the remedy has a specific effect on the tubercular tissues, and is, therefore, applicable as a very delicate and sure reagent for discovering latent, and diagnosing tuberculous processes.

The lay press, with its usual scientific acumen, has pronounced the Koch discovery a failure; whereas, the opinion of those who know most about it feel that it has a certain not yet well-defined field of usefulness, and that time and further experimentation are necessary to an intelligent understanding of the capabilities and limitations of Professor Koch's discovery. Let us wait patiently.

ERRATA.—The following corrections of typographical errors may be made in the JOURNAL for December, 1890, page 287: Line 10 from above, leave out "aid;" line 12 from above, for "temporarily," read temporally; line 24 from above, for "consideration," read connection.

EIGHT patients are being treated in the Post-Graduate Hospital by Koch's lymph. Three of them are cases of lupus; four are cases of phthisis pulmonalis, and one laryngeal tuberculosis. The inoculations are in charge of Dr. W. C. Bailey, who was for a long time a student in Koch's laboratory, assisted by the director of the laboratory, Dr. J. H. Linsley.

Society Meetings.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

OFFICERS AND COMMITTEES OF THE SOCIETY.

President William Warren Potter, Buffalo. *Vice-President*—Lewis S. Pilcher, Brooklyn. *Secretary* Frederic C. Curtis, Albany. *Treasurer* Charles H. Porter, Albany.

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on *Medical Ethics*—A. Jacobi, New York; Arthur Mathewson, Brooklyn; H. R. Hopkins, Buffalo. *Committee on Prize Essays*—George F. Shrady, New York; Daniel Lewis, New York; Eugene Beach, Gloversville. *Committee on Publication*—F. C. Curtis, Albany; Chas. H. Porter, Albany; Charles Cary, Buffalo; O. B. Douglas, New York.

Provisional programme of papers for the eighty-fifth annual meeting in the City Hall, at Albany, on Tuesday, Wednesday, and Thursday, February 3d, 4th, and 5th, 1891, commencing at 9.15 A. M. Tuesday, and ending at 5 P. M. Thursday.

<i>Business Committee.</i>	{	HERMAN BENDELL,
		178 State St., Albany.
		SENECA D. POWELL,
		12 West 40th St., New York.
		JAMES D. SPENCER,
		Watertown.

FIRST DAY—TUESDAY. MORNING SESSION—9:15.

President's inaugural address, appointment of committees, executive business.

PAPERS.—Railroad Surgery, Clinton B. Herrick, Troy. A Report of Cases of Injury to the Knee-Joint, with Remarks, Henry Flood, Elmira. The Management of Sinuses in Chronic Bone and Joint Diseases, V. P. Gibney, New York. Necrosis of the Ribs, Complicating Potts' Disease, Louis A. Weigel, Rochester. Brief Notes on Gastrotomy, with Report of a Successful Case, Charles A. Powers, New York. The Action of Trypsin, Pancreatin, and Pepsin, upon Sloughs, Coagula and Mucopus, Robert T. Morris, New York. Operative Procedures in Acute General Suppurative Peritonitis, W. E. B. Davis, Birmingham, Ala. The progress of Cystoscopy in the last three years, Willy Meyer, New York. A Plea for Rapid Dilatation, Holt's Operation, in the Treatment of Urethral Stricture, F. R. Sturgis, New York. A Case of Imperforate Anus of Eight Weeks' Standing, Operation and Recovery, Wm. Hailes, Jr., Albany. A Contribution to the Surgical Treatment of Jacksonian Epilepsy—Excision of the Arm Center, Edward B. Angell, Rochester.

AFTERNOON SESSION—2.15.

Diagnostic Significance of the State of the Pupils, E. C. Spitzka, New York. Three Diagnostic Symptoms of Melancholia—Second Communication, Landon Carter Gray, New York. Hysterical Manifestations Due to Alcoholism, H. C. Coe, New York. Cases of Traumatic Hysteria, Henry Hun, Albany. Insomnia and its Treatment, E. N. Brush, Philadelphia. The Causes of Asthenopia, D. B. St. John Roosa, New York. The Treatment of Detachment of the Retina, David Webster, New York. On the Use of Platinum Instruments in the Extraction of Cataract and in Other Operations upon the Eye, E. Gruening, New York.

Migraine and Headache from Eye Strain, Peter A. Callan, New York. One Thousand Cases of Ocular Headache and the Different States of Refraction Connected Therewith, W. F. Mittendorf, New York. Double Optic Neuritis, Frank W. Ring, New York. Some Points in the Pathogenesis of Aural Vertigo, Oren D. Pomeroy, New York. Catarrh and its Cure, O. B. Douglas, New York. The Correction of Angular Deformities of the Nose by a Subcutaneous Operation, John O. Roe, Rochester. Certain Hygienic Measures in the Treatment of Catarrhal Affections of the Upper Air Passages, F. H. Bosworth, New York.

EVENING SESSION—7.15.

Discussion on Appendicitis.

The Pathology of Appendicitis, Herman Mynter, Buffalo; Arpad G. Gerster, New York. The Indications for Early Laparotomy in Appendicitis, Charles McBurney, New York; William W. Keen, Philadelphia. The Technique of Operative Interference in Appendicitis, Lewis A. Stimson, New York; George Ryerson Fowler, Brooklyn. The Propriety of and the Indications for the Resection of the Appendix Vermiformis During Quiescent Stage of Chronic Relapsing Appendicitis, Joseph Price, Philadelphia; Robert F. Weir, New York. The Relation of the Physician and the Surgeon in the Care of Cases of Appendicitis, Albert Vander Veer, Albany.

SECOND DAY—WEDNESDAY. MORNING SESSION, 9.15.

Discussion on Pelvic Inflammation in Women: Its Pathology and its Palliative, Conservative and Radical Treatment.

Introduction, Andrew F. Currier, New York. Pathology, A. J. C. Skene, Brooklyn; W. Gill Wylie, New York. Palliative Treatment C. C. Lee, New York. Conservative Treatment, W. M. Polk, New York. Radical Treatment, Joseph Price, Philadelphia; L. S. McMurry, Louisville, Ky.

These papers will be discussed by Dr. Thomas Addis Emmet (probably), of New York, Dr. Franklin Townsend, of Albany, and others.

PAPERS. —The Treatment of Posterior Displacements by the Utero-Vaginal Ligature, H. J. Boldt, New York. Minor Gynecological Surgery, Maurice J. Lewi, Albany. The Treatment of Injuries to the Floor of the Vagina, Horace Tracy Hanks, New York. An Inquiry into Our Present Knowledge of the Progress of Myomatous Tumors after (a) The Use of the Electric Current; (b) Removal of Ovaries and Tubes; (c) The Old Method of Treatment by Rest, Intrauterine Applications and Ergot, James F. W. Ross, Toronto. My Experience with the Surgical Treatment of Retroflexion, and Prolapsus Uteri, Paul F. Mundé, New York. Surgical Treatment of Ectopic Gestation, Charles A. L. Reed, Cincinnati, O. Some of the Results of Defective Sanitary Arrange-

ments in the Puerperal State, James P. Boyd, Albany. The Management of Tedious Labor, Egbert H. Grandin, New York. A Report of Four Cases of Cancer of the Clitoris where Clitoridectomy was Performed, Franklin Townsend, Jr., Albany. The Emotional Element : the Puerperal Period, Adam H. Wright, Toronto.

AFTERNOON SESSION—2.15.

Discussion on Pulmonary Tuberculosis.

History, H. R. Hopkins, Buffalo. Etiology and Pathology, Heneage Gibbes, Ann Harbor, Mich. Diagnosis and Prognosis, Alfred L. Loomis, New York. Manifestation in Upper Air Tract and Special Treatment thereof, John O. Roe, Rochester. Treatment, including Prophylaxis, as Related to Climate, Samuel B. Ward, Albany. Treatment as Related to Therapeutics, E. L. Shurley, Detroit.

PAPERS.—Koch's Lymph, and Tuberculosis, A. Jacobi, New York. Experiences at the Mt. Sinai Hospital and Polyclinic Hospital with Koch's Lymph, Henry N. Heineman, New York. Therapeutical Notes on Acute Respiratory Diseases, A. Jacobi, New York. Lobar Pneumonia with the Production of Connective Tissue in the Air Spaces, Francis Delafield, New York. The Treatment of Gall Stones, William Wotkyns Seymour, Troy. Treatment of Itching, Edward B. Bronson, New York. On the Causes of Eczema, L. Duncan Bulkley, New York. A Case of Pemphigus, H. R. Hopkins, Buffalo. The Treatment of Pigmentary and Vascular Naevi, George Henry Fox, New York.

EVENING SESSION.

Anniversary Address by the President, eight o'clock. Assembly Chamber. Annual dinner of the Society, 9.30 o'clock, Delavan House.

THIRD DAY—THURSDAY. MORNING SESSION, 9.15.

Executive Business.

PAPERS.—How a Mammary Amputation for Cancer Should be Conducted, Robert F. Weir, New York. Electro-Cautery in Surgery, with Special Reference to its Use in the Nose, Mouth and Throat, D. H. Goodwillie, New York. Etiology and Development of Malignant Neoplasms, A. B. Macallum, Toronto. Intestinal Obstruction; Report of Cases, J. H. Glass, Utica. The Unrestricted Evils of Prostitution, Andrew F. Currier, New York. Croupous Rhinitis, Frank H. Potter, Buffalo. Vesicular Eruption in Scarlatina, F. C. Curtis, Albany.

AFTERNOON SESSION—2.15.

The Relation of Physicians to Boards of Health, Lewis Balch, Albany. The Necessity of an Amendment in the Laws Governing Medical Evidence in Malpractice Suits, R. J. Wilding, Malone. The Present Status of the Proposed Law to Regulate the Practice of Embalming Human Dead Bodies, A. Walter Suiter, Herkimer. Subject to be

announced, William S. Ely, Rochester. Subject to be announced, Clarence C. Rice, New York. Subject to be announced, Lucien Howe, Buffalo.

Personal.

DR. WILLIAM C. KRAUSS, of Buffalo, has been placed upon the editorial staff of the *Journal of Nervous and Mental Disease*, New York, one of the oldest and best journals devoted to this specialty in America.

DR. FRANK W. LOW, of Buffalo, read an interesting paper on Phagocytosis, at the Joint Convention (Dentists), held in Rochester, October 27, 1890, which is published in the *Dental Advertiser*, January, 1891.

Book Reviews.

A MANUAL OF MODERN SURGERY. An Exposition of the Accepted Doctrines and Approved Operative Procedures of the Present Time. For the use of students and practitioners. By JOHN B. ROBERTS, A. M., M. D., Professor of Surgery in the Woman's Medical College of Pennsylvania; Professor of Anatomy and Surgery in the Philadelphia Polyclinic; Lecturer in Anatomy in the University of Pennsylvania. Octavo, 780 pages, 501 illustrations. Cloth, \$4.50; leather, \$5.50. Philadelphia: Lea Brothers & Co. 1890.

The name of the author would lead us to expect something quite above the average, and the reader of this *Manual of Modern Surgery* will have his expectations completely realized. In this work we find the same impartial and common sense method of dealing with questions which have characterized his previous writings. In the preface, he says, "the opinions of the best authorities, the methods of the most practical surgeons, and the well-established facts of surgical science are discussed; but the consideration of theories, historical questions, traditional views and operations and innovations of undecided value, has been rigidly avoided."

In all this choosing and rejecting the author has shown excellent judgment, so that the reader has nothing but strictly modern and accepted surgical principles and practice to occupy his attention. Clearness and conciseness are conspicuous throughout the entire work. Personality, too, is stamped upon every page.

The author begins his work with the consideration of inflammation, then takes up destructive inflammatory processes, such as suppuration, ulceration, gangrene, etc., then general surgical diseases like erysipelas, pyemia, tuberculosis, syphilis, rachitis and others are discussed from the standpoint of a practical surgeon.

In the chapter upon Plastic or Reparative Surgery, which occupies only about seven pages, the author has given us the salient points regarding this special field of surgery.

Part II. is devoted to the surgical diseases of the various tissues and regions of the body. One of the best chapters in this part is that upon the Nerve-centres and Nerves. The author would substitute contusion or laceration for the term concussion of the brain, and he regards the set of symptoms which we call compression of the brain, as due to concomitant inflammation as well as actual compression from extravasated blood, depressed bone, etc. The treatment of cranial fractures, although occurring in another part of the book, may be mentioned here. The author is more radical than most surgeons would deem justifiable. A fairly large experience with this class of cases leads us to believe him much nearer right than wrong. We have never regretted working along the lines he has indicated; on the contrary we have upon two occasions regretted not doing so. An admirable syllabus of treatment of cranial fractures is given, in which the author's views are contained "in a nutshell." It must be confessed that there is considerable ambiguity at times, which, perhaps, is due to the condensation. There is no mention of hammer and chisel as a means of entering the cranium in place of the trephine. Certainly there is no comparison between them in the matter of speed and ease to the operator, and the theoretical consideration that concussion is thereby added to we have never seen borne out clinically.

The chapter upon Surgical Diseases of the Abdomen and Pelvis is thoroughly modern and the text much enhanced by numerous illustrations. Much valuable information is contained in the few paragraphs upon the method of operating within the abdomen and pelvis.

In discussing the surgery of the heart and blood-vessels we have been given good, sound, surgical advice; the same may be said of diseases and injuries of bones.

Fractures and Dislocations are given in a terse, yet quite complete, way that is certain to please the student. Few surgeons, we imagine, will agree with the author that hooks are better than

wiring in patellar fractures. In his own mind there is no question as to the correctness of his opinion. He says: "The treatment of fractured patella by wiring the fragments, and the management of cases with long fibrous union by resection and wiring, are not justifiable. The disability resulting from imperfect connection of the fragments is not great enough to warrant the additional though slight risk assumed. Such, at least, is my opinion. I am prepared to have the fracture in my own person treated by hooks, but not by wiring. Therefore, I recommend one and condemn the other."

In the diagnosis of dislocations of the head of the humerus Dugas's rule is not mentioned,—a misfortune, it seems to us, since it is so easily remembered and so reliable.

Fractures of the lower end of the radius are treated in a very common sense, practical way which will meet the approval of most surgeons.

The book abounds in excellent things, omissions being few and usually of unimportant matters. Both students and practitioners will find it most convenient and satisfactory.

The illustrations are numerous and many of them new, a tribute alike to the originality of the author and the liberality of the publishers.

J. P.

CAUSES AND TREATMENT OF STERILITY IN BOTH SEXES, AND FECUNDATION BY ARTIFICIAL METHODS. Translated from the French of Dr. J. GERARD. Paris, with notes by Chas. Everett Warren, M. D., Boston, Mass., U. S. A., with 200 illustrations, designed by Joscé Roy. Printed for private use only by the profession. Boston, Mass.: Published by the *International Medical Exchange*.

This is the title of a very curious book in six parts, the first of which only is before us. The publishers say in their introduction: "This unique work, produced in miniature from the French, nominally relates to sterility, but incidentally introduces, in an amusing colloquial manner, many facts relating to the hygiene of the sexual organs and the relations of the sexes, etc."

A first glance at this remarkable production is hardly calculated to recommend it to the earnest student of the mysteries of which it treats, but a nearer view will soon convince him that under a pleasant colloquial form the learned author has managed to give a good deal of light upon a very dark subject. This first part treats of latent sterility, and every line gives evidence of consummate knowledge obtained by careful study.

There is, in this first part, nothing new to the well-educated

physician, and, indeed, the author takes this for granted by avoiding needless explanations, and thus enabling him to give the greater value to the naked facts in the scientific and natural grouping intended to support his conclusions. The humorous style and fanciful imagery with which he illustrates one of the most important subjects in nature's laboratory, while it takes nothing from her dignity and is well calculated to excite serious thoughts of a highly practical turn, makes the work amusing as well as instructive.

We wait with impatience the appearance of the whole work which, judging by the specimen, will, no doubt, be a valuable addition to our medical literature.

The illustrations are unique, clever and spirited; but, though their boldness may serve to call attention and even aid the memory, we think science would be better served by modifying some and omitting others altogether.

THE PHYSICIANS' HAND-BOOK FOR 1891. By ALBERT D. ELMER, M. D.
New York: G. P. Putnam's Sons. *The Knickerbocker Press*. 1891.

This book has been a favorite with the profession for over thirty years, combining the features of a visiting list, account book and hand-book of practice. The W. A. Townsend Publishing Co. has transferred its publication to the Putnam's, and that means no falling off in the mechanical execution and all that pertains to good work on the part of the publishers.

The hand-book contains some unique features and ought to be examined by every physician.

BOOKS AND PAMPHLETS RECEIVED.

Text-Book of Hygiene. A Comprehensive Treatise on the Principles and Practice of Preventive Medicine from an American Standpoint. By George H. Rohé, M. D., Professor of Obstetrics in the College of Physicians and Surgeons, Baltimore; Member of the American Public Health Association; foreign Associate of the Société Française d'Hygiène, etc. Second edition, thoroughly revised and largely re-written, with many illustrations and valuable tables. 8vo. pp.x. —421. Philadelphia and London: F. A. Davis. 1890. Price, \$2.50 net.

Twelve Lessons on the Structure of the Central Nervous Systems for Physicians and Students. By Dr. Ludwig Edinger, Frankfort-on-the-Main. Second revised edition, with 133 illustrations. Translated by Willis Hall Vittum, M. D., St. Paul, Minn. Edited by C. Eugene Riggs,

A. M., M. D., Professor of Mental and Nervous Diseases, University of Minnesota; Member of the American Neurological Association. 8vo, pp. xii.—230. Philadelphia and London: F. A. Davis. 1890. Price, \$1.75 net.

An Illustrated Encyclopædic Medical Dictionary. Being a dictionary of the technical terms used by writers on medicine and the collateral sciences, in the Latin, English, French and German languages. By Frank P. Foster, M. D., editor of the *New York Medical Journal*, assisted by eleven collaborators. Vol. II. Cac—Fasay. With illustrations. 4to, pp. 792. New York: D. Appleton & Co. 1890.

Professor Koch's Method to Cure Tuberculosis Popularly Treated. By Dr. Max Birnbaum. Translated from the German by Dr. Fr. Brendecke. With an appendix, being Prof. Koch's first communication on the subject, translated from the *Deutsche Medicinische Wochenschrift*, and Explanatory Notes by the Author. Milwaukee, Wis.: H. E. Haferkorn. 1891. Price, paper, 75 cents; cloth, \$1.00.

A Text-Book of the Diseases of the Ear. By Dr. Josef Gruber, Professor of Otology in the Imperial Royal University of Vienna, etc. Translated from the Second German edition by special permission of the author, and edited by Edward Law, M. D., C. M., Edin., M. R. C. S., Eng., Surgeon to the London Throat Hospital for Diseases of the Throat, Nose and Ear; and by Coleman Jewell, Lond., M. D., M. R. C. S., Eng., Late Physician and Pathologist to the London Throat Hospital. With 150 illustrations and 70 colored figures on two lithographic plates. Cloth, large 8vo, pp. xxiv. — 580. New York: D. Appleton & Co. 1890. Buffalo: Otto Ulbrich.

The Surgical Conception of Peritonitis. By Joseph Price, M. D., Philadelphia, Pa. Reprint, Vol. III., Transactions American Association of Obstetricians and Gynecologists. 1890.

A Large Group of Mixed Specimens. Illustrating the Principal Complications and Varieties of Pelvic and Abdominal Surgery. By Joseph Price, M. D., Philadelphia, Pa. Reprint, Vol. III., Transactions American Association of Obstetricians and Gynecologists. 1890.

Certain Causes of Major Pelvic Troubles Tracable to Minor Gynecology. By Joseph Price, M. D., Philadelphia, Pa. Reprint, Transactions Philadelphia County Society. 1890.

Timely Topics for Medical Men. Koch's Discovery (Illustrated). Alimentation as a Therapeutic Measure. The Acetogen Chemical Co., Yonkers, N. Y.

Census Bulletin No. 16. December 22, 1890. Population of the United States by States and Territories. 1890. By Robert P. Porter, Superintendent of the Eleventh Census.

Third Annual Report of the Methodist Episcopal Hospital. Brooklyn.

N. Y., covering the period from November 1, 1889, to October 31, 1890. Through Lewis S. Pilcher, M. D., one of the attending surgeons.

Annual Report of the Rhode Island Hospital. 1890. Providence, R. I: E. L. Freeman & Son, Printers to the State.

Twentieth Annual Report of the Managers of the Buffalo State Hospital, for the year 1890. Albany: James B. Lyon, State Printer. 1891.

Bulletin of the American Academy of Medicine. No. 1. January, 1891.

Bulletin of the Agricultural Experiment Station. Botanical Division. Cornell University. College of Agriculture, xxiv.; December, 1890. The Clover Rust. Ithaca: Published by the University. 1890.

The Atmospheric Tractor. A New Instrument, and Some New Theories in Obstetrics. By Peter McCahey, M. D., Philadelphia. Reprint from *Medical and Surgical Reporter*. November 29, 1890.

Recent Therapeutical Notes on the Use of Papoid (Carica Papaya) in the Treatment of Dyspepsia and Diphtheria. Johnson & Johnson, Manufacturing Chemists, 92 William street, New York. 1890.

Bulletin of the Experiment State Entomological Division. Cornell University, Department of Agriculture, xxiii.; December, 1890. Insects Injurious to Fruits. Ithaca: Published by the University. 1890.

Internal Oesophogotomy. Report of a Case. By John O. Roe, M. D., Rochester, N. Y. Reprint, *BUFFALO MEDICAL AND SURGICAL JOURNAL*. May, 1890.

Instruments Presented at the Tenth and Eleventh Meetings of the American Laryngological Association. By John O. Roe, M. D., Rochester, N. Y. Reprint.

The Treatment of Diseased Tonsils when unattended with Hypertrophy. By John O. Roe, M. D., Rochester, N. Y. Reprint: *New York Medical Journal*, October 26, 1889.

Pyoktanin in Diseases of the Eye, Ear and Throat. By W. Cheatnam, M. D., Louisville, Ky. Reprint: *The Lancet-Clinic*, November 15, 1890.

Removal of Tonsillar Hypertrophy by Electro-Cautery Dissection. By Edwin Pyncheon, M. D. Reprint: *Journal of the American Medical Association*, November 22, 1890.

Fifty Remembers for Druggists. By H. M. Whelpley, M. D., Ph. G., St. Louis, Mo.

Abnormal Intra-Thoracic Air Pressures and Their Treatment. Address at the Seventh Annual Meeting of the American Climatological Association, September 2, 1890. By Charles Denison, A. M., M. D., Denver, Colo., President. Reprint: *The Sanitarian*, November, 1890.

Hydrophobia. By Hiram Corson, M. D., Conshohocken, Pa. Reprint: *Medical and Surgical Reporter*, November 29, 1890.

Note on the Virile Reflex. By C. H. Hughes, M. D., St. Louis, Mo. Reprint: From *Alienist and Neurologist*, January, 1891.

The Psycopathic Sequences of Hereditary Enlargement. By C. H. Hughes, M. D., St. Louis, Mo. Reprint: *The Alienist and Neurologist*. October, 1890.

Medical Department, University of Wooster. Announcement for 1891. Cleveland, O.

HEALTH BULLETINS.

Michigan State Board of Health. Health in Michigan. December, 1890.

Summary of Deaths in Newport, R. I., for the year 1890.

Newport, R. I.: Report of Deaths and Contagious Diseases for December, 1890.

I. Pennsylvania State Board of Health. Circular No. 29. The Dangers Arising from Public Funerals of those who have Died from Contagious and Infectious Diseases. Addressed to the Clerical Profession.

II. Circular No. 30. The Disposal of the Sewage of Public Edifices. Addressed to the Managers of Public Institutes.

III. Circular No. 31. Precautions to be Adopted by Funeral Directors to Prevent the Spread of Contagious and Infectious Diseases.

Abstracts of Sanitary Reports U. S. Marine Hospital Service. Volume VI., Numbers 1, 2, 3, and 4.

Miscellany.

THE MATTISON PRIZE. OPIUM ADDICTION AS RELATED TO RENAL DISEASE. A PRIZE OF FOUR HUNDRED DOLLARS. With the object of advancing scientific study and settling a now mooted question, Dr. J. B. Mattison, of Brooklyn, offers a prize of \$400 for the best paper on Opium Addiction as Related to Renal Disease, based upon these queries:

Will the habitual use of opium, in any form, produce organic renal disease?

If so, what lesion is most likely?

What is the rationale?

The contest is to be open for two years from December 1, 1890, to either sex, and any school or language.

The prize paper is to belong to the American Association for the Cure of Inebriety, and be published in a New York medical journal, *Brooklyn Medical Journal*, and *Journal of Inebriety*.

Other papers presented are to be published in some leading medical journal, as their authors may select.

All papers are to be in possession of the Chairman of Award Committee on or before January 1, 1893.

The Committee will consist of Dr. Alfred L. Loomis, President New York Academy of Medicine, Chairman; Drs. W. V.

Formad, Philadelphia; Ezra H. Wilson, Brooklyn; Geo. F. Shrady, and Jos. H. Raymond, editor *Brooklyn Medical Journal*.

CIVIL SERVICE EXAMINATION.—An open competitive examination of candidates for superintendent and first assistant physician in any of the state hospitals and asylums, will be held at the rooms of the Civil Service Commission, Albany, N. Y., Thursday, March 5, 1891, commencing at 10 o'clock, A. M.

A candidate for the position of superintendent must be a citizen of the State of New York, at least thirty years of age, and have had at least five years' actual experience as a physician in a hospital for the insane.

A candidate for the position of first assistant physician must be a citizen of the State of New York, twenty-five years of age, and have had at least three years' actual experience as a physician in a hospital for the insane.

Also at the same time and place, candidates for female physician, as provided in Chapter 243, Laws of 1890, will be examined.

Application blanks may be had by addressing the secretary of the New York Civil Service Commission, Albany, N. Y.

JOHN B. RILEY, Chief Examiner.

ALBANY, N. Y., January 14, 1891.

ANNOUNCEMENT.—E. B. Treat, publisher, N. Y., has in press for early publication the Ninth Yearly issue of the *International Medical Annual*. Its corps of thirty-seven editors—specialists in their respective departments, comprising the brightest and best American, English and French authors—will vie with previous issues in making it even more popular and of more practical value to the medical profession. We have the assurance of some of the best medical practitioners, that the service rendered their profession by this *Annual* cannot be duplicated by any current annual or magazine, and that it is an absolute necessity to every physician who would keep abreast with the continuous progress of practical medical knowledge. Its index of new remedies and dictionary of new treatment, epitomized in one ready reference volume, at the low price of \$2.75, make it a desirable investment for the busy practitioner, student and chemist.

FOR SALE.

WE HAVE for sale house and lot and good-will of a practice worth \$3,500 to \$4,000 per year, in one of the most thriving and beautiful villages in Western New York. Railroad town, water and electric light. For further particulars, inquire of the Editor of this Journal, 433 Delaware avenue, Buffalo.

NOTICE TO CONTRIBUTORS.—We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the JOURNAL should be handed in before the first day of the month. The Editors are not responsible for the views or opinions of contributors. All communications should be addressed to

284 FRANKLIN STREET, BUFFALO, N. Y.

MOSQUERA'S FOOD PRODUCTS—BEEF MEAL, BEEF CACAO.

PARKE, DAVIS & Co., whose reputation for original work has long been established, announce that after thorough study of the various food products they can now supply preparations which will fulfil all the requirements for therapeutic and dietetic use.

Physicians, in their practice, very frequently meet with cases where nutrition is of more importance than medication; in fact, cases where nutrition is the only agent they can count upon. The question of replacing the waste of tissue, where normal nutrition is inefficient, by means of concentrated or predigested foods, is one that always presents many difficulties, there being very few preparations, if any, that meet all the requirements of the medical profession.

Heretofore medical practitioners have had at their disposal a great variety of preparations of meat. These are divisible into four great classes. We have, in the first place, the extracts of meat, prepared after the formula of Liebig; then the so-called meat juices; next the ordinary powdered meats; and, finally, the meat peptones.

The ordinary process of preparing meat extracts involves a simple extraction of meat with either warm or cold water, and an evaporation of the resulting solution continued until reduced to a thick liquid or paste. This extract contains the inorganic soluble salts of the meat and some stimulating organic matter, but none of the nourishing, flesh-forming albuminous substance.

The meat juices are merely cold extractions of the meat, and such products contain some soluble albumen, which coagulates out upon boiling, and, naturally, cannot amount to much more than four or five per cent. The meat juices, therefore, possess but little nutritive value.

Powdered meats, as heretofore known, are nothing more nor less than the residue left after extracting all the soluble constituents. Dujardin-Beaumetz and several therapeutists, as a result of a careful line of experiments, concluded that this powder possessed a high nutritive value, and could be employed to advantage in the treatment of certain diseases (consumption and dyspepsia especially). That they are concentrated nutrients is a fact, for beef, in its natural condition, contains seventy-five per cent. of moisture, all of which is driven off in the preparation of the powder. The fact, however, that these powders are liable to become rancid, or else have been deprived of the inorganic salts, peculiar to meat in its natural state, which salts are quite essential in the digestive process, is an objection to the meat in this form. Moreover, powdered beef requires

just as much effort on the part of the stomach to digest it, as does ordinary beef, and for this reason cannot be regarded as a proper food for patients suffering with derangement or weakness of the digestive organs.

Another group of meat preparations embraces the meat peptones.

Peptone is the ultimate product of digestion, and the form in which the albuminous or proteid matter is assimilated by the system. These peptones are invariably the product of the artificial digestion of meat by animal pepsin and hydrochloric acid, or, although to a smaller extent, by the digestive ferment of the carica papaya. These are the only preparations really valuable as nutrients. But the physician meets here with another difficulty, in many cases insurmountable; the taste of the peptones is, more or less, bitter and objectionable to the palate, so that patients either absolutely refuse to take them, or take them only with the greatest repugnance. Besides this, their price is comparatively so high that frequently the physician is obliged to abstain from prescribing them.

All the difficulties heretofore encountered by the medical profession in the use of predigested foods, have been overcome by the new food products of the Mosquera-Julia Food Company.

Mosquera's Beef Meal contains all the stimulating principles of the extracts of meat, and, in addition, the nutritive principles which the extracts lack; all the albumen of meat juices without their weakness; all the strength of powered meats without their rancidity and insolubility; all the peptone of the peptonized meats without their bitterness.

The claims we make on behalf of Mosquera's Beef Meal, therefore, cannot be over estimated; they are based on its analysis and properties, and may be condensed as follows:

Mosquera's Beef Meal is a perfectly pure predigested meat, containing all the nutritious constituents of good lean beef, half of which are in soluble form, ready for immediate assimilation, and the other half easily digestible by the gastric and pancreatic juices. Therefore the entire preparation, being practically dry, is composed of nutritive matter, containing about forty per cent. of soluble peptone and albumose.

It represents, in actual nutritive value, at least six times its weight of good lean beef.

It is perfectly palatable, and will be tolerated with ease by the most delicate stomach.

It admits of being administered in a variety of forms, thus avoiding monotony in the food.

It is the most nutritious as well as the most economical concentrated food.

To physicians interested a pamphlet fully descriptive of the special advantages, uses and methods of administration of these preparations will be mailed on request, and samples will be sent to physicians who desire to clinically test them in practice.

Buffalo Medical ^{and} Surgical Journal

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Original Communications.

MECHANICAL RESTRAINT IN OUR STATE HOSPITALS FOR THE INSANE.¹

By GROS. R. TROWBRIDGE, A. M., M. D.

Assistant Physician to the State Hospital for the Insane, Danville, Pa.

SO MUCH has been said on this subject, and during the past two or three years it has been brought so forcibly to the attention of the medical staffs of our insane hospitals, that I feel almost like making an apology for saying anything in regard to it; still, I think, in the face of the present preponderance of feeling against mechanical restraint, that a few words spoken in its favor will not come amiss.

If the American public only could or would understand what is meant by mechanical restraint, as employed in our state hospitals for the insane, and the reasons for which it is used, and take a sensible and unbiased view of the matter, I am positive "exhortations and expostulations" against this "barbarous custom" would, in a great measure, cease; and could all be brought to look at the subject from a humanitarian standpoint, there would much less be said against it.

True, it is a question with which an enterprising (?) reporter of some sensational newspaper can fill a column or two, and so bring to the notice of an easily deceived public the soul harrowing tales of the indignities and cruelties inflicted by the use of mechanical restraint in our insane hospitals.

By the word "restraint," as it is used by the alienist of today, I understand the *depriving of voluntary action of an individual either for his own or the safety of others, or for his mental, moral and physical good; the individual being irresponsible for his conduct.*

Before entering upon any discussion on this subject, let us, for the

1. Read before the Monroe County (Pa.) Medical Society.

sake of a few comparisons, take a brief retrospect of the methods of restraint in vogue fifty or sixty years ago, and to accomplish this I have taken the liberty of making a few extracts from the works of the Hon. Wm. P. Letchworth, of Buffalo, N. Y., entitled "The Insane in Foreign Countries." The author, in his work, gives a clear and concise account of the methods of "restraint" used in foreign asylums half a century ago.

He says :

The methods of restraint in common use included iron hand-cuffs connected with chains to a leather waist-belt ; leathern hobbles locked around the ankles, which permitted the patient to shuffle his feet, but impeded his movements so that he could not walk ; iron hand-cuffs with chains, which passed through fastening locks at the sides of heavy "tub bedsteads," filled with straw, boots made of ticking, with rings and chains which passed through fastening locks at the bottom of the bedsteads.

These were methods of restraint which were at the same time unnecessary and barbarous, and are looked upon today with abhorrence and disgust. In those days the idea seemed instilled into the minds of those having the insane in charge, that these unfortunates were perfectly responsible for their acts, and the slightest outburst of maniacal excitement was treated not in a rational, careful manner, but by these relics of barbarism which fortunately for the good and welfare of the insane have gone entirely into disuse.

I may be criticised for advocating mechanical restraint and yet not upholding these methods. Still, no one could for a moment liken the restraint of today to that I have just cited. The restraint in vogue in our state hospitals is used for medical and humane reasons, while that of fifty years ago was a mere "convenience" and an easy and safe way of disposing of and caring for lunatics.

In the majority of hospitals in England, which Mr. Letchworth visited, very little restraint was in use, though all were prepared to employ it if it was thought necessary.

Of St. Anne's Hospital, in France, he says : "Restraint is used in the form of chains and bedsteads fastened to the floor," to which I suppose the patient is secured by means of straps, locks, etc.

At Gheel, Dr. Peteers has the following methods : (1.) A broad padded belt or band, five inches wide, for locking around the upper part of the arms. In this belt is an iron loop, through which passes a strap for securing the patient to the side of the bed. (2.) Two padded leather bands, three inches broad, connected in the center by a link two inches

long. These are designed for the ankles of the patient. To each is attached a loop of iron, through which a strap is passed and fastened to either side of the bedstead. (3.) Two padded soft leather wristbands, three inches wide, separating the wrists about eight inches. Dr. Peters said these were scarcely ever used. (4.) A broad leather belt encircling the body with two leather pockets in front for the hands, which are secured in their position by wristlet straps. Extending from this belt across the shoulders, suspender fashion, are straps which retain in position and relieve the weight of the belt, which locks at the back.

At none of these places was restraint used unless absolutely necessary. I have given a brief outline of the methods of restraint in some of the foreign hospitals. In this country I do not think such elaborate methods are employed, but on the contrary the appliances are much more simple and just as effective.

Of course, strong arguments can be brought to bear against mechanical restraint, but as I have said, I think these opinions are, for the most part, advanced by persons not understanding the subject. My own observations and conclusions, since my connection with a hospital for the insane, are that in the treatment of certain cases of insanity, in the control of certain individuals, it is for the good of the patient mentally, morally and physically that restraint be applied. Let me impress the fact that I do not refer to the restraint of years ago, or the reasons for employing it, but a restraint judiciously and conscientiously used under the direction of a *medical man*, who is fully competent to judge, and is perfectly familiar with the case. Some of our hospitals, in their reports, boast with evident pride that "no mechanical restraint has been used during the past year." To my mind this is no reason for a burst of enthusiasm from "non-restraint" supporters, as it only shows that, if proper care and attention was given to the inmates, that the hospital or asylum contains a class of patients which does not require restraint, or that it contains but a small number of cases where mechanical restraint is necessary, and that employed with a view to making the patient more tractable, and to saving him from doing harm to himself or others, or from overpowering the staff of attending physicians, or from being a plain nuisance to the other inmates, which duty it is to see that the physician, nurse, or attendant is enabled to perform.

I consider it much better to have a few cases of insanity and employ a few simple and judicious appliances, than to pretend mechanical restraint is never used, and to have a large number of inmates who are transformed by the influence of the hospital into beings that, by their ungoverned passions, do more harm to the hospital than

and struggle for the mastery and usually the result is the injury of either attendant or patient, or both ; while in the second case a few futile attempts, and the individual perceiving that struggles are useless, will, in nine cases out of ten, cease his violence. Then, again, it is a well-known fact, that despite the most careful means of selection, not all attendants are to be trusted, and it may happen that blows are given and violence committed against the excited patient, which by mechanical restraint could easily have been avoided ; besides it is a most trying task for attendants to sit hour after hour endeavoring to control an insane person who is bent on his own destruction or that of some one else, and it is not surprising that they lose their tempers and become irritable in the discharge of such a task.

Manual restraint will, without fail, cause resentment on the part of the patient, and he or she will be brought to look on the attendant as a tormentor, and this will of necessity be a detriment to a possible restoration, as it is in the power of attendants to be either a benefit or a hindrance in the care of the insane. To my mind there is no chance for a comparison between the two methods, manual and mechanical, where a safe, continued and absolute restraint is required.

I do not wish to be understood as advocating an indiscriminate use of mechanical restraint. It should be applied only by the physicians understanding the nature and necessities of the case and not by every Tom, Dick and Harry connected with the institution.

Dr. Nicolson,¹ of the Broadmoor Criminal Asylum, England, says :

The question as to the employment in lunatic asylums of what is known as "mechanical restraint," occupied a considerable amount of public attention last year. The legitimate or justifiable use of mechanical restraint is one thing, the authorized abuse of it another. The sanction of modern times in this country is clearly against the use of mechanical restraint ; and very properly so in recollection of the extent to which it was carried in days gone by. The existing practice is, as a matter of fact, in accordance with this sanction ; and the exceptions when this form of restraint is used for other than surgical reasons, are sufficiently few to afford the best proof of the rule. Besides sanction and practice, an element of sentiment has crept into the matter which would fain make it of the nature of a crime to use mechanical restraint at all, unless, perhaps, in surgical cases.

Mechanical restraint is practically unknown at Broadmoor. It was,

1. *Journal of Mental Science*, July, 1880.

I believe, used on a few occasions in the early days, but for over twenty years it has been found possible to do without it. The comparatively numerous staff of attendants at this asylum enables exceptional strength to be brought to bear when occasion requires it; but my own feeling in the matter is that in a case of continuous and long-sustained maniacal violence, with an activity avowedly and determinedly homicidal, it is possible to carry the non-restraint principle (so-called) too far and at too great a cost. Few people who are not engaged in it are able to estimate the wear and tear of nerve and heart, which a tussle with a desperate lunatic of this sort means to the attendants, apart from the risk of positive injury either to the patients or warders. And when this struggle has not only to be anticipated, but to be engaged in several times a day for a lengthened period, the justifiability and humanity of simple, effective and safe mechanical restraint become apparent.

If ever it should be my lot to be a lunatic, such as the one whose treatment is here in question, I hope my good friend, the superintendent, who has me in charge, will not be too squeamish about recent traditional usage, but will see that I am checked by the minimum but necessary amount of restraint to insure my own safety and that of others. On the one hand, I do not wish to think that under any circumstances I should be the means of inflicting injury upon my attendants; on the other hand, I would infinitely prefer mechanical restraint to the long continued manipulations, however skilful and friendly, of four or more attendants heaped upon my prostrate form. . . . The evil to be feared with regard to mechanical restraint is lest its legitimate use should lead to its authorized abuse. This could never happen if, in every case, the physicians themselves were to order it to be used, and that only after a careful and complete personal investigation. When the restraint is applied by underlings and its use afterward sanctioned by the responsible officers, we have the authorized abuse which is altogether wrong and reprehensible.

The Commissioners of the Derby County Asylum, England, make the following statement :

Two females and one male have been restrained each once: the male from January 19, 1889, to February 16, 1890, to prevent self-mutilation. One woman for two nights and a day, to prevent her pulling out her hair and injuring herself, the other woman for thirty-nine hours, because she was dangerously violent to herself and others. They were all restrained by this jacket. The woman last mentioned is convalescent, and when speaking to us, remembered her restraint, and spoke gratefully of it, which appears to have been quite necessary and to have, in fact, saved her life.

Dr. Manry Deas, of Exeter Asylum, says:

In two cases, especially the morbid impulse to self-injury was so

strong, that I did not hesitate to resort, for a considerable length of time, to the employment of what is termed mechanical restraint in the form of a dress, so as to restrict the free use of the arms and hands. This I did both for the sake of the additional protection thus afforded to the patients against themselves, and also, I feel bound to say, to give some relief to the great, almost intolerable strain and responsibility devolving on those having the care of such cases. One of the patients is now convalescent and the other much improved. Restraint of some kind is the basis on which all treatment of the insane, whether legal or medical, is based : and the enlightened modern treatment of the insane does not lie so much in the abolition of restraint as in the carrying out of various kinds of restraint, under constant and humane supervision.

A physician having the responsible care of the insane, ought to be as free to employ mechanical restraint, when he deems it the best treatment in a particular case, as he is to use powerful drugs or any other recognized mode of treatment.

The special advantages of confining the hands by mechanical means are that the restraint is continuous while in use, it is always vigilant, it does not lose its temper, and it avoids the many risks attendant on manual restraint.

For myself, I do not hesitate to say that there are cases in which "mechanical" restraint is not only the best and most humane treatment, but in which there is a grave responsibility attaching to the man who refrains from using it. I have never regretted the use of mechanical restraint when, after full consideration, it has been resorted to ; but there have been, in the course of my experience, cases in which afterwards I regretted that I had not used it.

Such is the testimony of a few English superintendents.

The great weight of evidence brought to bear against mechanical restraint is advanced by medical men who have no idea what is meant by the term, and a large number of them who have never set foot inside a hospital for the insane, and yet they hold up their hands in holy horror at the mention of the term "mechanical restraint."

I venture to say that any of these men who are visiting physicians to our General Hospitals, never hesitate to use restraint in the "drunk" cases which are so frequently admitted to those institutions, and from my own experience as Resident Physician in a large general hospital I can testify that this restraint savors very strongly of hand-cuffs and ropes, and yet these same men consider restraint among the insane a barbarity. Perhaps, under the circumstances, they would show mercy to "crazy doctors," and at least sanction restraint when applied to alcoholic cases.

One often hears the expression, "Treat an insane man as you would a sane one."

This advice is all very well as far as it goes, but, unfortunately, it does not go very far. It is much more difficult to deal with a diseased mind than a sound one, and every physician knows that on many occasions even sane people decline to follow their directions.

It must be taken into consideration in dealing with the insane that the mind is the part disordered and makes the individual an irresponsible being, and consequently in many cases the appreciation of right and wrong, the power of reason and understanding, are destroyed, and we have the base animal nature to deal with. Let me instance two or three cases which have come under my observation. The first is that of a man who was admitted to this hospital in a most deplorable condition, both mentally and physically. Reverses in business had been the cause of an attack of acute melancholia, with extreme suicidal tendencies so strong, that he had made one attempt on his life before admission. This individual was carefully but securely restrained to a bed by means of sheets. His recovery was rapid, and four months later he was discharged, restored, and is now actively engaged in business.

I do not assert, by any means, that being tied to a bed was the source of this restoration, but I say that it was an extremely important factor in the case. The second was a case of melancholia, who, if not restrained, would disfigure himself by picking holes in his arms, and on one occasion nearly succeeded in reaching the brachial artery. Besides, his intentions were suicidal, and for these reasons restraint was applied.

The third is a case of an epileptic, imbecile boy, who, in outbursts of excitement, pounds his head on the floor with terrific force. Any manual restraint only increases his excitement, while a roller bandage, loosely applied, confining his hands behind him, has the effect of controlling his violence.

Here are three cases in which restraint was justifiable, and I maintain that in the first of these three cases, it has been of more value in restoring the individual to reason, than a rigorous diet in the treatment of the disease.

Let us consider a fourth and more dangerous instance, two chronic and cases of maniacal excitement with violence, who are almost always destructive to themselves and others. In the first case mechanical restraint has not been applied: in the second it has been suggested.

both cases are restored. The first leaves the institution with scars and marks, due to his violence. The second leaves the hospital physically sound, with no marks or scars, and simply because he has worn a leather muff for a few days, or, perhaps, weeks. The first has marks of his own violence to remind him that he was at one time "crazy," while number two has not this distinction.

Again, it is not pleasant for friends to visit their unfortunate relatives and find them covered with bruises or cuts, inflicted either by their own hands or some violent patient, all of which might have been prevented by the use of mechanical restraint. Moreover, besides being an unpleasant thing for the friends of patients to see them injured in this way, it is a discredit to the hospital, though how frequently do such cases occur in all institutions for the insane!

Why is mechanical restraint a more barbarous custom than forcible feeding, and yet it is just as serious a matter to allow an individual to commit suicide by self-injury as by starvation, but one rarely hears any objection to the nasal feeding tube.

In the report of the Committee on Lunacy in this State (Pa.) for 1889, the secretary mentions the fact that there had been "no mechanical restraint" used in the female department of the Norristown State Hospital for the Insane for "the past year," commends the fact and asks "Why not the same in other hospitals?"

This inquiry is certainly a very strange one. Lunatics differ as well as sane people, and have to be treated accordingly. The female department of Norristown is to be congratulated on having such an easy class of the insane to deal with.

This matter of "mechanical restraint" should be carefully considered before it is voted a relic of barbarism.

DR. BEVERLY ROBINSON stated, at a recent meeting of the Practitioners' Society of New York, that the fact had come to be pretty generally recognized that a cardiac murmur of itself meant very little. It came down to the question whether the heart was doing its work well. There were certain ways of determining that point, aside from physical signs. One evidence of lack of proper compensatory power was difficult breathing; a second was palpitation; a third was pain in and around the heart. If no renal nor other physical evidence that the heart was suffering, the mere presence of a cardiac murmur should not be considered as of great importance. — *Practice*. — *Lancet-Clinic*.

OVARIAN AND LIGAMENTOUS CYSTS CO-EXISTING IN THE SAME PATIENT; OPERATION; DEATH FROM SHOCK.¹

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,

Consulting Gynecologist to the Maternity Hospital; Fellow of the American Association of Obstetricians and Gynecologists.

THIS case is presented for record by reason of the unusual shape and size of the patient's abdomen, the dual nature of the cysts, and as illustrating the dangers of repeated tapings and delay in submitting to an operation for radical cure:

Mrs. X., of Allegany county, New York, was referred to me by Dr. W. W. Crandall, presenting the following history: Age, twenty-six years, married; one child five years old, no miscarriages. Soon after confinement, more than five years ago, she observed that her abdomen began to enlarge, and within a few months she was tapped and fifteen quarts of fluid drawn. During the next three or four months she was tapped twice more, when ten and eight quarts of water were drawn at the respective tapings. During the past few years she has not been tapped, but her abdomen has become greatly distended, rendering it burdensome, and nearly or quite preventing locomotion. Her appetite and digestion were fairly good, menstruation regular, no constipation, kidneys moderately active, and bladder not irritable—all of which seemed remarkable when the size and shape of the belly were considered. She was greatly reduced in flesh, had a feeble heart, and presented other signs of failing vitality. There was a soft, protruding area to the left of the umbilicus, and slightly above its plane, which was strongly indicative of an approaching rupture of the cyst through the external abdominal walls.

Operation July 9, 1890. In making the abdominal incision it was noted that the usual anatomical landmarks were wanting, and the cyst-wall was slightly punctured unawares. It was with much difficulty that a start could be made in the separation of the cyst-wall from the peritoneum, and these were so stoutly adherent for so great an area that much time was required in freeing this cyst, which was without pedicle, and appeared to spring from the right broad ligament. Another small cyst was tied off which proved to involve the right ovary. On the left side was another large cyst made up of and including innumerable other cysts, varying from the size of a marble to an egg, besides a few nearly or quite the size of a Florida orange. The first or right cyst contained about five gallons of a brownish-yellow fluid mixed with flakes and masses of a soft, friable, fibrinous material. The left cyst contained, in

1. Read at the annual meeting of the American Association of Obstetricians and Gynecologists, in Philadelphia, September, 1890.

addition to the myriads of smaller ones, about three and a half gallons of fluid, ordinary in general appearance and characteristics. The ental walls of the right cyst were roughened, and in many places lined with a fibrinous material that formed thick deposits. The ectal walls were covered with shreds of connective tissue, especially ventrad where extensive adhesions had taken place between its ectal layers and the peritoneal surfaces.

The cysts had, in fact, two points of support: the one, ventrad, formed by the peritoneal adhesions; the other, dorsad, their point of departure from the uterine appendages. I have already mentioned the fusion between the cyst-walls and the peritoneum; this was so stout that at one time it was feared that it would thwart removal. There was, however, very little hemorrhage, in spite of all the difficulties presented.

This instance well illustrates the dangers that may surround a neglected case, and presents a strong argument for early operation. In justice to Dr. Crandall it is proper to add that, as soon as the patient consulted him, he advised her to make all possible haste in submitting herself to an operation, and he finally persuaded her to do so.

The woman took ether badly, and was despondent; moreover, she was devitalized by the long-continued strain and drain on her mental and physical powers. She died, from shock, within three or four hours after the completion of the operation.

The illustration (Fig. 1), from a photograph taken just before the operation, conveys a better impression of the size and shape of the tumor than any description can afford. The distorted abdomen looked, to use the graphically laconic words of Dr. Frederick, who was present and assisted me, as if "a huge watermelon had been implanted end-first in its walls."

DISCUSSION.

Dr. ROBERT T. MORRIS, of New York. —As a rule, I am opposed to tapping ovarian cysts: however, in such cases as this, where the cyst is so large, it seems to me that we avoid the danger of shock if, one, two, or three days before the operation for its removal, we draw off a part of the fluid contents, the amount to be withdrawn to be determined by the judgment of the surgeon. All are familiar with the great shock that sometimes follows a simple tapping operation. If, then, we add to this the shock by removing the walls of the tumor, and disturb the large sympathetic plexuses of the abdomen, we paralyze the sympathetics which control the circulation of the blood, thus inhibiting digestion, causing the formation of gas, and great distress, to say nothing of the danger of disturbing the vaso-motors of the heart.



FIG. 1. OVARIAN AND LIGAMENTOUS CYST.

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Dr. POTTER (closing the discussion).—Perhaps I might have been a little more explicit in describing the case and the operation. It will be remembered that this patient was brought to me some distance from the country, and that she had already been tapped several times by some physician who apparently did not appreciate the importance of *always* withholding the trocar in this class of cases. On account of the great distention of the abdomen and the consequent visceral and vascular pressure, the propriety of an ante-section tapping was considered, and I discussed it with Dr. Frederick, now one of the Fellows of the Association, who was kind enough to assist me at the operation. We finally concluded that we would not further complicate the case, particularly in the patient's nervous state, by such a procedure, but that we would evacuate the fluid slowly during the operation, and make systematic and deliberate artificial pressure, with a view to counterpoise the sudden release of tension.

Dr. Morris has done wisely, in my view, in calling attention to the fact that ovarian cysts should not be subjected to early tapping. This is, I doubt not, the present attitude of abdominal surgeons on this question; there are not two opinions among men of experience in regard to it. To the early tapplings, in the case I have reported, I attribute the extensive adhesions that so nearly baffled our efforts at removal of the right cyst.

The preliminary tapping of large cystomata that Dr. Morris advocates may be a very useful measure in properly selected cases, and it will be seen that it was considered, though rejected, in the present instance; but I believe it is an expedient that needs wise discrimination in its employment, and one of very limited application.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Reported by WILLIAM H. THORNTON, M. D., Secretary.

The regular annual meeting of the Society was held at the rooms of the Young Men's Christian Association, Tuesday, January 13, 1891, at 10.30 o'clock A. M.

The meeting was called to order by the President, Dr. GEORGE W. McPHERSON, of Lancaster.

The minutes of the last semi-annual meeting were read and approved.

The report of the Committee on Membership was presented by the chairman, Dr. A. A. HUNNELL. The following applicants were

recommended for membership : Drs. L. B. Dorr, B. S. Bourne, Henry J. Mulford, E. A. Forsyth, H. Y. Grant, C. O. Chester, C. T. Wolsey, William A. P. Andrews. Several other applicants were not recommended, because they failed to comply with the by-laws and rules governing admission.

Upon motion of Dr. CALLANAN it was voted that the report of the Committee on Membership be received and the recommendations adopted.

The following applications were received and referred to the Committee on Membership : Drs. R. L. Patteson, W. J. Riehl, Earl G. Danser, William Dowlman, William P. Clothier, John J. McCullough, John Housberger, E. H. Young, W. H. Chase, C. R. Jennings, J. F. Sell, M. J. O'Connell, James P. Wilson, W. H. Woodbury, and Hugh S. Townsend.

The newly-elected members present were then introduced to the Society.

The President appointed the following Committee on Nominations : Drs. A. A. Hubbell, E. H. Long, W. W. Potter, Joseph Fowler, and Edward Clark.

Drs. Crego, Long and Bartlett presented their resignations as delegates to the State Medical Society.

Upon motion of Dr. CALLANAN the resignations were accepted.

President McPHERSON delivered the annual address to the Society.

THE PRESIDENT'S ANNUAL ADDRESS.

DR. W. W. MCPHERSON, M. D., CLARKSBURG, N. Y.

Gentlemen — Members of Erie County Medical Society :

Being about to retire from office, it is expected that I should address myself to you in a more formal manner.

In the first place, let me thank you for the uniform courtesy and kindness which you have shown me, and for the material assistance you have afforded me while presiding over your deliberations.

Instead of making a definite and logical topic and treating it analytically and historically, I have concluded that a more general survey of the field of your daily activities would be productive of more good.

Solon, one of the sages of ancient Greece, on being interrogated as to what constituted the ideal state or government, replied : — "That in which an injury done to the least of its citizens is an injury done to all." What is true of high political and governmental organizations

is true also in the best subordinate societies, so that, as far as it is known, an injury done to the least member of the medical profession is an injury done to all. If this be true, we can draw the natural inference that the promotion or advancement of one of the members is a good done to all. Out of this thought arises the idea of an individual *personal obligation* to the profession.

"It is the glory of our profession," says one writer, "that it is exclusively and rigidly scientific." It is built upon the works and laws, not of man, but of God — laws, too, not indeterminate, but capable of being classified and measurably controlled by the human mind. Scientific knowledge is imperishable and cumulative; therefore, each generation of doctors should be superior to their predecessors.

One way to advance the profession is to place a high ideal before the mind of the student prior to his taking up the study of medicine. Let him be a graduate of a college, a bachelor or master of arts, before entering upon the study of medicine. Do not rest satisfied until this is accomplished. The medical colleges are doing much to bring this into favor. They have within a few years elevated the standard of medical education, perhaps as rapidly as it is expedient, but they should not stop short of making the literary college the portal to the medical college. Let this be the rule, and the exceptions few, and every one who thus enters will, other things being equal, so comport himself that his life work will be of a superior character. A good preliminary education is a powerful element in the professional struggle, for the physician is expected to have a large acquaintance with general scientific subjects and literature.

From the earliest times men were engaged in the healing art, and in precise proportion to the general culture of the people was our profession consisted of well-developed and superior men. Therefore, a physician should be a thoroughly educated man. If any class in the community should be well trained, so, naturally, in particular with mental, moral and cultural sciences, it is the physician.

The student must not expect to become a physician after beginning the *practice of medicine*. Every one in the profession to prosecute the *study* as it would direct him to the cases he is called upon to *meet*, *on* is the *patient* demands *to* *be* *to* *can* *do*. The art of *meeting* *diagnosing* *treating* *will* *passion* *is* *of* *the* *most* *useful* *study* *after* *knowing*.

As you go out on your daily rounds, as much as it is possible, bring to the bedside a clear mind and good judgment, and an ever-increasing valuable experience, for it is experience and skill that the public seek.

In the next place let me remark that every physician in the State should belong to a medical society, even if the law had not made it obligatory, for beside the individual benefits which accrue to the member, a genuine professional spirit is generated that constantly minimizes all that is unprofessional. A man is unworthy to be a member of any society who is not willing to sacrifice something of his personal right for the good of the whole. Acting on this line, it has always been considered the proper thing to do in the regular profession, when a new remedy or treatment is found out, to publish it to the world, so that all physicians can give humanity the benefit.

Thus, by advanced medical knowledge and skill, by better ventilation and sewerage, and the isolation of patients, the average length of human life has been increased. What has been added to each life in the last two hundred years is equal to the saving of a million of lives. This applies only to the civilized nations. This work will still be carried on, and you must do your share of it. The physician's life is a busy one, and there is but little room for the idler. He would soon find the place occupied by some who loved to work, for the work *must be done*.

This diversity of interest among physicians, on account of family relationships, and the multitudinous bonds of society calling two physicians in the same family, leads me to emphasize the necessity of great care in your business relations with one another. Observe both the rules and the spirit of the code of medical ethics. It is intended to be for a saving of time in the ever-changing relations of society, but in no sense is it subversive of the golden rule. The code only shows the application of the golden rule to individual cases, and is founded on equal rights and privileges. Show that you belong to a noble profession, even under provocation. Honor and duty require you to do right, not for policy, but because it is *right*. Courtesy, truth and justice should mark every step of your career.

"You must be charitable, not censorious, self-effacing, not self-seeking, and you must try at once to think and to do the best for your rivals and antagonists that can be done." As Lincoln said concerning things political, "With malice toward none, with

charity for all, with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in."

The great glory of our profession is the practical use which has been made of knowledge by its members. The very soul of its life seems to be a constant inquiry: How can suffering be alleviated? How can disease be removed? How can life be made more comfortable and prolonged? To accomplish this, no investigation can be too minute, no labor too severe, no exposure too dangerous.

The true medical profession discards all *schools*, or *cliques*, or *parties*. It is as old as civilization. It never forgets anything. It neither receives nor discards anything because it is old, or because it is new, but following the precept, "It proves all things and holds fast that which is good."

Or in the language of Professor H. C. Wood, "There are but two bodies in the field of medicine, physicians and the *paths*. Try to make the public understand this. If you must have some name," said he, "let it be that of a common-sense doctor, who, brought face to face with the problems of life and death, is willing to save life in any way, who acknowledges no boundaries, no sects, no schools, but who searches heaven and earth to find means to relieve suffering and cure disease."

Some of you do not half appreciate the fact that you are in the line of the regular work of the profession where all methods and remedies, which *true science* may bring forward, can be used without a change of principle or a sacrifice of your manhood.

Who would think of having anything but a regular work on anatomy, physiology or chemistry?

You may call the chemicals by other names, as is often done by designing men, in order to appear different from the great majority. You may use different names for the muscles, bones and nerves than those used in our standard works on anatomy. The same may be said of physiology, materia medica and surgery. But you should not desire, for selfish and *personal ends*, to depart from the great beacon lights of true science.

"What is the best treatment known to the world for a case like the one before me? If you give him that without regard to creed or boundary, that is practising rational medicine."

Bear in mind that competent medical men all over the world, in the interest of truth and suffering humanity, investigate and test all so-called systems when they arise, and the conjoined result gives us a true, common-sense verdict. This is being done now with the

treatment for consumption proposed by Dr. Koch, of Berlin. The verdict will be given when thoroughly tried. In the meantime hold your souls in patience.

Let me direct your attention to some of the elements of success that as you advance to greater and still greater degrees of success as individual practitioners, we all, and the profession at large, may be benefited by your advancement and promotion.

Sophocles said, "Fortune never helpst he man whose courage fails." And I read somewhere a concise statement of the reasons why, sometimes, a good doctor does not reach success: "It sometimes arises from the superabundance of qualities in themselves good; as, from a conscience too sensitive, a taste too fastidious, a self-forgetfulness too romantic, and a modesty too retiring." The opposite extremes would make a man a disgrace to any profession. Entertain loftier sentiments and make nobler efforts to build your fame on a strong foundation. Do nothing that will not stand every test.

Chauncey M. Depew, when speaking at the commencement exercises of Syracuse University last Spring, before the graduates in medicine, used language which I think is worthy to be repeated:

"Every conscientious doctor presents a picture full of romance in the realities of his experiences, of character which strengthens the weak, of breezy hopefulness which encourages the despairing, and of deeds and thoughts which so sanctify him that his presence elevates society."

"The destiny of man is largely in his own hands," said Dr. J. W. Hamilton, "and a man's energies are set in just equation with his *opportunities* and *worth*. Success comes to the man of indomitable perseverance and worth. There is no road that will avoid labor, and the measure of a man's success is the measure of the motive and power by which he is moved." And Dr. Clark, one of England's foremost physicians, said, "the man to succeed must believe that *labor is life*, and successful labor is *life* and *gladness*, and that success with high aims and just objects will bring to him the fullest and happiest life that can be lived upon earth."

Some of the members of this Society whose demise we deplore, had a national reputation, I might say a world-wide fame; others have gone to other fields of usefulness. Among the *many*, allow me to mention the names of Flint, Hamilton, Miner, White and Rochester. Here is an illustration of how the elevation of the few can result in good to the many. It is no flattery when I say that

there are many of the present members of the Erie County Medical Society, who have already attained to great distinction. This is a foreshadowing of still greater professional triumphs. Then, let each member seek to *improve himself*, to succeed according to the possibilities that are in him, till it shall be seen that there is a general advance all along the line. As the field and forest, by leaf and flower, show the beneficent effects of the rain, and the light and warmth of God's sunshine, so may we as members of a lofty profession show that we are living, growing, rising and flourishing to meet the ever-increasing demands of this great city and the age.

Upon motion of Dr. STORCK it was voted that the thanks of the Society be tendered to the President for his able address, and that a copy be requested for publication.

The Treasurer read his annual report, as follows: Receipts, \$583.48; expenditures, \$222.00; balance in treasury, \$361.48.

Upon motion of Dr. CALLANAN, it was voted that the report be received and referred to an Auditing Committee.

Dr. ABBOTT, chairman, presented the report of the Committee on List of Members, and distributed proof lists of the names as found by the committee.

Upon motion of the committee it was voted that the printed list distributed, together with the names of those today elected members of the Society, be the official list of members of the Medical Society of Erie County; also that the names of the ex-presidents be printed in a different style of type from the other names.

Upon motion of Dr. JOHN CROYS, it was voted that the report of the Revising Committee be received and adopted.

The Auditing Committee reported that they found all the accounts of the Treasurer correct.

Upon motion of Dr. POTTER, it was voted that the report of the auditing committee be adopted.

Dr. E. STORCK, chairman, presented the following

REPORT OF THE BOARD OF CENSORS.

To the Medical Society of the County of Erie:

Since the last annual meeting of the Society, a State Board of Medical Examiners has been created, by a law passed by the Legislature of this State, and will go into operation September 1, 1891. Graduates of medical colleges of this and other states, and those from foreign countries, will have to submit their diplomas to that

board, be examined and acquire a license of the Regents of the State University, before they are allowed to practise medicine or surgery within this State.

Diplomas endorsed by the faculty of any medical college of this State, after June 1, 1890, are invalid, and the holder thereof is not legally authorized to practise in this State.

The board of censors was directed by the Society to bring an action against some practitioner who has failed to become a member of one of the county societies after having been notified to do so, in order to test the legality of the law of 1828, which, as it is claimed, has not been repealed by any medical law since passed, namely, to make it compulsory for any physician to become a member of a legal medical society of the county where he practises. We have deferred such action until the question has been submitted and decided by the State Medical Examiners and the Regents.

The section of the medical law, giving medical societies the right to discipline their own members, is still in force and should be more rigidly enforced. Your board has information that among the members of this Society, there are some who persistently violate its by-laws and the code of medical ethics, by being connected in so-called medical institutes "or companies" that secure by quackish advertisements and pamphlets some business in and outside of the county. If sufficient proof is furnished of their offense, the board will prefer charges against them to the Society at its next meeting.

The "advertising doctor" has, in fact, become quite an institution in this city and state. The newspapers are full of "ads." of "specialists" and "medical institutes," that promise to cure all ailments of mankind by "new and approved methods." It seems as if the whole doctor business will soon be done in this way. The idea has already become prevalent among the younger class of physicians, that in order to be successful in the profession and make money fast, one has to seize a specialty or step out of the regular profession, and advertise his skill and success either in the advertising or local columns of the newspapers. This mania threatens to become prevalent and contagious, several of our regular graduates have been affected, and I am sorry to say a member of the Board of Censors has lately also been seized by it. What are we going to do about it? The question has repeatedly been asked: Why do the censors not interfere with these advertising doctors? Simply because they can't.

These managers of medical institutes know very well how to

evade the law, or rather how to manage their business in compliance with the law. They advertise that "a staff of European physicians," or a corps of consulting doctors from "Boston and New York," are attached to their medical institute; they publish marvelous cures that have been effected by them, but when we look up the Medical Registry, we never find the names of any such celebrities, but only the name of some young graduate of unknown fame; or of an old country physician who is legally authorized to practise under a license granted by some county society before we had any medical laws, and under the protection of one or both of them, these impostors of "medical institutes" are allowed to humbug the people and fleece the dummies out of their money. A short time ago the board served notice upon three specialists, whose names were attached to the "ad." of one of those "catarrhal institutes," but did not appear upon the Medical Registry, that they would be prosecuted for violating the medical laws of the State; a prompt answer was returned by their attorney, saying: "Don't trouble yourself with any prosecutions; this concern is sailing under the flag or diploma of a regular graduate, *a member of your Society.*" Those signed to the advertisement were but managers. That member is more an object for commiseration than for discipline. The success of all such institutions simply depends upon extensive advertisements like that of *patent medicines*, and shows that anything can be made to pay if you only advertise it well. There are plenty of people that believe with the old settler, "it must be true, for it stands in the newspaper," and as long as the newspapers can divide the profits with those "institutes," they will not interfere with their business and expose these impostors.

Some of these *dyspeptic* and *catarrhal* institutes have lately adopted quite a business-like method to make money out of their patients; they advertise to treat them cheap by contract, say \$5.00 a month, or less if a few months are taken and cash paid down; this is quite an inducement for some suffering with a chronic catarrh or some imaginary ailment. One of them, who is now in the last stage of tubercular laryngitis, said to me the other day: "I had treatment for several months; I had taken ninety eight bottles of medicine, and it cost me only \$25.00." In addition to that he had the satisfaction of having his name and his picture appear in the newspapers, and held up as a *well man*.

Probably no law can be enacted to prevent the people from being humbugged "*millions with doctors*," but it should be made a

misdeemeanor for any physician, legally authorized to practise, to advertise in a quackish manner in the public press, or by pamphlets, or associate himself in business relation with the managers of bogus medical institutes that are guilty of obtaining money under false pretenses.

The Regents should have power to revoke his license to practise. Our State Medical Societies should urge upon all county societies to report the names of such practitioners registered in their County Clerk's office where they are engaged in such irregular practice, to the faculty of their alma mater that has granted their diploma and that they disgrace. Their names should be stricken from the roll of its alumni, and if they are members of some legal societies in the State, they should be expelled from its membership.

Your board would further report that several persons practising in violation of the law in this county, have been notified by the Censors to desist from doing so, but as they still continue to practise, their names will be given to the District Attorney, who will bring the cases before the next Grand Jury.

There is another class of impostors that prey upon suffering humanity under false pretenses: they go by the names of Christian Scientists or healers and clairvoyants. Their practice does not strictly come under the medical law, but rather under the Penal Code. Our efficient police authority will, before long, give them an opportunity to defend themselves on charges of a criminal offense. They are still more dangerous to the public than the "catarrhal institutes," as they fleece the people out of their money under the protection of the Christian religion or so-called science.

THE BOARD OF CENSORS.

EDWARD STORCK, *Chairman*.

Upon motion of Dr. HOYER, it was ordered that the report of the Board of Censors be received and published in the **BUFFALO MEDICAL AND SURGICAL JOURNAL** with the report of the meeting.

Upon motion of Dr. PHELPS, it was voted that a printed circular be issued by the Society, and sent by the President to such practitioners in the county as were mentioned in the report of the Committee on List of Members, and who were not members of the Medical Society of Erie County.

Dr. W. W. POTTER offered the following preamble and resolution, which was unanimously adopted:

WHEREAS, The by-laws of the Medical Society of the State of New York, require that each society entitled to representation therein, shall purchase each year a number of copies of the State Society Transactions, equal to five times the number of delegates it is entitled to send to the State Society, therefore

Be it Resolved, That the Treasurer of this Society is hereby instructed and required to disburse annually, a sufficient sum to comply with the aforementioned rule of the State Society, to be reckoned and accounted for as a part of the current expenses of this Society, payment to be made on the voucher of the Treasurer of the Medical Society of the State of New York. This order to take effect immediately, and to include the Transactions for 1890.

Dr. ROSWELL PARK extended an invitation to the physicians present to attend a demonstration of the use of the Koch lymph, at the Buffalo General Hospital, at three o'clock p. m.

The Committee on Nominations reported in favor of the following officers :

President, E. C. W. O'Brien ; *Vice-president*, W. H. Gail, of East Aurora ; *Secretary*, William H. Thornton ; *Treasurer*, F. W. Abbott ; *Librarian*, Lucien Howe.

Censors, Edward Storek, R. L. Banta, Henry Lapp, Clarence ; M. B. Folwell, E. H. Ballou, Gardenville.

Membership Committee, A. A. Hubbell, F. H. Potter, John A. Pettit.

Delegates to State Medical Society, to fill vacancies, B. H. Grove, B. H. Daggett, Edward Clark.

Dr. THORNTON stated that having served as secretary for five years, he was not a candidate, and requested that another name be substituted for his.

Upon motion of Dr. HUBBELL, Dr. E. H. Long was nominated for secretary.

Upon motion of Dr. DONLASH, it was voted that the Secretary cast the ballot of the Society for the officers, as presented by the Nominating Committee, as amended above.

The ballot was cast as directed, and the President declared these gentlemen duly elected.

Dr. ANSWERT moved the adoption of the resolution introduced by him at the last regular meeting of the Society, that Article II, of the By-Laws be amended by the addition of the words "Assistant Secretary" after the word "Secretary," and the addition of the words "Assistant Treasurer" after the word "Treasurer." Motion carried.

Upon motion of Dr. ABBOTT it was voted that this year the Treasurer and Secretary be allowed to name their own assistants.

Upon motion of Dr. BARTLETT it was voted that the Society pay Dr. J. B. Samo the sum of \$100 for his past services as Librarian.

Upon motion of Dr. C. A. RING it was voted that Drs. S. G. Dorr, C. Diehl, E. T. Dorland, John Cronyn, C. G. Stockton, J. B. Andrews, F. S. Crego, H. Lapp, W. H. Gail, G. Abbott, F. F. Hoyer and F. H. Stanbro constitute a committee to take into consideration such laws and regulations as will bring about the best care and treatment of habitual drunkards.

Upon motion of Dr. CREGO the following resolution was adopted :

WHEREAS, The Legislature of New York has enacted a law creating boards whose duties are to license properly educated physicians who have been legally graduated ; and,

WHEREAS, The general features of this law had their inception in the Medical Society of the County of Erie that formulated a similar measure in 1883, which was introduced into the Legislature by the Medical Society of the State of New York :

Therefore, Be it resolved that the Medical Society of the County of Erie, in annual session assembled, desires to express its approbation of the general plan of separating the teaching and licensing authorities, as provided for in the aforementioned law.

This Society desires to congratulate the Medical Society of the State of New York, and all the friends of reform in medical education, upon the success that has attended their efforts, after these seven years of constant labor, and pledges itself to any assistance in its power to make the law effective and bring substantial results.

Upon motion of Dr. HUBBELL, it was voted that the President and Secretary be authorized to appoint delegates to the Medical Association of Central New York, and issue certificates of delegation to those who may desire to act as such.

Upon motion of Dr. CREGO, it was voted that the President appoint a committee of ten to act as entertainment committee and committee of arrangements, to entertain the members of the Medical Association of Central New York.

Upon motion it was voted that the thanks of the Society be rendered to the President, for the efficient manner in which he has presided over the meetings of the Society, and also to the other out-going officers.

Upon motion the meeting adjourned.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

Reported by WILLIAM S. GARDNER, M. D., Secretary.

JANUARY MEETING.

THE president, Dr. HENRY M. WILSON, in the chair.

Dr. L. E. NEALE read a paper upon "*The Indications for Cesarean Section.*" This paper is intended to stimulate interest in and discussion of the subject Cesarean section vs. craniotomy on the living child, upon which subject a series of papers will be presented by the members of the Society. It refers particularly to the indications for the section, and is a plea for this operation.

If it serves to arouse interest in examining pelves, or increases hesitancy in destroying children, the labor is not in vain.

Craniotomy upon the living fetus is believed justifiable, but only as a dire necessity, not as an elective procedure, and should not be resorted to where there is a reasonable probability of success by the section, and the uncoerced consent of the mother can be obtained. No man is compelled to do craniotomy upon the living fetus solely upon the choice of the patient or her friends.

In answer to the question, "What would you do if the patient were your wife, your sister, or a near relative?" he believed practically this must be a matter for each man's conscience, over which no dogmatic rule of science can or should have sway.

If seen early enough, the induction of premature labor at the thirty-second or thirty-fourth week by the method of Krause was a very strong antagonist to craniotomy upon the living fetus. The range for this operation should not extend to a conjugata vera below $2\frac{1}{2}$ inches (7 cm.) or to one above $3\frac{1}{2}$ inches (8.75).

The indications for the conservative section included all insurmountable obstructions to the delivery of the living and viable child *per vias naturales*.

They include tumors, pelvic exudations, hypertrophic elongation of the cervix, cicatrices, stenoses, tetanus uteri, falciform uterine contractions, etc. He believed general opinion placed the limit for the absolute indication at a conjugata vera of $1\frac{1}{2}$ inches or 3.75 cm., and the relative indication extended from that point up to an undermined conjugata vera measurement, and included many other conditions besides pelvic contractions. Other things being factable, a $2\frac{1}{2}$ inch or 6.25 cm. conjugata vera (Harris) 3 inch, 7.5 cm. conjugata vera (Lusk) called for section rather than craniotomy, but be

warned against relying *entirely* upon pelvimetry in the relative indications. In contracted pelves he preferred version to forceps when both were practicable. He insisted upon pelvimetry and briefly outlined the methods. He believed it was chiefly by this means we could determine the indication for the section.

A conjugata vera of 3 inches, 7.5 cm., was generally admitted to be the least through which a living child of normal proportions could pass, and as Lusk continued, if other diameters were lessened or the contraction was not limited to the brim, it might require a conjugata vera of $3\frac{1}{2}$ inches, 8 cm. or more. No hard and fast line could be given; each case must be judged alone. The relative size of the head, its resistance, the past history, the uncoerced consent, the general condition and surroundings of the patient, etc., were all important factors in the relative indication.

The life of the child was not "purely impersonal and scientific," but eminently personal and practical, and he believed the mother should run a reasonable risk in its interest. The life-saving of craniotomy could never be as great as that of C. S., for it started with a necessary mortality of fifty per cent., or half the lives at stake. But aside from all argument and comparative statistics, the section was decidedly restricting craniotomy. All depreciated the repeated performance of craniotomy on the same woman. He accepted Carl Brann's rules for the relative indication.

Craniotomy was safer for the mother than section, but piecemeal extraction was equally if not more dangerous—ex. 92, conjugata vera $2\frac{1}{2}$ inches 6.25 cm., or less.

If conservative delivery p. v. n. had been attempted and failed, this was a strong point in favor of craniotomy and against the section under these increased dangers.

He strongly deprecated conservative tampering, and then resorting to the section; many lives had been thus sacrificed. If we desired success we must make the section an elective operation, and not a procedure of dire necessity.

Dr. MILTENBERGER: With regard to the paper of Dr. Neale's, confined as it is to the indications for the Cesarean section, there is nothing which I would controvert. Under the absolute or positive indications as laid down, there can be no question. The confusion and discrepancy of opinion have arisen from want of definiteness and clearness as to the relative indications.

If we take the statistics of craniotomy generally, including all cases, we get no positive resulting data to guide us. Where the

pelvis is so contracted as to necessitate the piecemeal extraction of the fetus, it is recognized, undoubtedly, as the most serious of obstetric operations, and more dangerous than Cesarian section.

Where, on the other hand, craniotomy alone is required, the operation is simple and the danger to the mother, in proper hands, should not be greater than from the application of the forceps. In my individual experience with my own patients, I have been obliged to resort to craniotomy but twice in fifty years, and in these, as well as in those in consultation practice, the mothers have all recovered.

Now it is just in this latter class that the doubt arises.

The smallest conjugata vera diameter through which a living child has been expelled is three inches, or, as has been claimed, 2 $\frac{1}{4}$ inches, but with this we cannot expect to save the child through the natural passages.

But whether with this or a little more available space, we must recognize the prime and absolute importance, as the doctor states, of pelvimetry, and to its thorough practical study and application must we mainly look for increased certainty. Especially does this hold as to external pelvimetry, the best instrument by far being the hand of the obstetrict.

Now, while it is true the measure here of the conjugata vera by the finger may not be perfectly accurate, and we require also to learn the available space in the transverse diameter, yet with care it sufficiently approximates the truth for our purpose.

But on the other hand, as the doctor has said, we cannot accurately determine the size of the child's head, its degree of ossification, etc. It is true by bimanual examination we can approximate the truth, but not exactly obtain it. I have known an accomplished accoucheur persist for a length of time in the use of forceps, before he recognized that he was dealing with a hydrocephalic head. Thus both the factors have elements of uncertainty. It is just in this class of cases that the doubt and uncertainty arises.

When the practical obstetrict meets with a case of dystocia, from this cause, by internal measurement he satisfies himself, as far as possible, he has three inches of available space in the conjugata vera, or even above this, without a full knowledge of the size of the fetal head, he naturally applies the forceps, or proceeds to turn and not improperly; but if he fails he has already violated the first fundamental law in *Cesareotomy*, to resort at first to the knife, without any previous operative manipulation, if such manipulation has been at all prolonged, the choice is not between craniotomy and Cesarian section, but between craniotomy and a *Porto*.

Fortunately, pelves contracted to this extent are rare in this country, particularly in the higher walks of life.

The operation of Cesareotomy is in itself sufficiently simple, and the modern section is, undoubtedly, one of the greatest advances in modern obstetrics, while its success constitutes a brilliant epoch in our recent history. In the hands of those skilled in the technique and taught and trained by experience, there is every reason to trust and believe that the modern Sanger will extend still farther its successes, and that as an operator gains tact and knowledge with every case with which he deals, and as a part of his success must depend upon his absolute command of his patient and her surroundings, it is most likely the old picture will be reversed, and with our septic and antiseptic precautions, hospitals will offer a smaller rate of mortality than private practice.

Fully realizing, as I do, the success of the modern Sanger, and the lessened mortality rate which has been achieved, yet we know that no abdominal section is entirely free from danger, and, as I said, in these cases of relative indication they may be claimed to be almost, if not entirely, void of peril with craniotomy.

I do not hesitate to declare that I should prefer, in my own wife, as the safer for her, craniotomy to Cesarean section in such a case, and am, therefore, bound to extend to others, my patients, the golden rule, "To do unto others, as I would they should do unto me." I am, therefore, forced to the opinion that Cesarean section will not completely supplant the old operation, and that there still remains a field, although markedly limited, for craniotomy on the living child.

Dr. J. WHITRIDGE WILLIAMS: I am sure that all of us are greatly indebted to Dr. Neale for the very clear manner, in which he has set forth the indications for the operation, and I almost entirely agree with him.

The absolute indication I would place at 5.5½ cm., or three inches, and the upper limit for the relative indication at 7½ cm., or three inches. Within these limits, unless the child be abnormally small, there should be no question as to the use of forceps, and the question to be decided is whether craniotomy or Cesarean section should be done.

Theoretically, I would choose the section in all cases that appeared favorable, but practically, I might waive my theory in the case of a primipara who had not been examined previous to labor. For in that case it might appear very hard to submit a young

woman to such a risk without any previous intimation of her danger.

But if I performed craniotomy under these circumstances, I would warn her that in becoming pregnant again she would take the responsibility of the child's life upon herself, and that I would refuse to perforate in subsequent pregnancies.

The mortality of the operation need not dismay us, for Munchmeyer has lately reported the latest statistics of Leopold, in which he reports twenty-eight Sänger operations, with the loss of three mothers and one child, and seven Porro operations with no maternal deaths.

Dr. B. B. BROWNE: I had a case recently upon which I did Cesarean section. The woman was twenty-seven years of age. She had had one child. Her labor was two years ago, when she had convulsions, and a craniotomy was done. As a result of injury received at this time, the vagina and uterus sloughed, and there was complete atresia of the vagina. This atresia was afterwards opened up, and she became pregnant.

The vagina was contracted by cicatricial bands, and an opening could be felt in the side of the cervix, but to the left of the opening was a cup-shaped cavity, which might have been the old cervix.

She was not sure of the time of impregnation. She was swollen and her urine solidified with albumin upon heating. Labor pains began December 20th, and continued for one or two days, but there was no dilatation. She came to the hospital December 22d. She had severe uterine contractions that day, and came for the purpose of having Cesarean section done. But next day the pains had all gone. The night of January 1st the waters broke, and severe pains began. The cicatricial bands about the cervix were cut, and Elliot's forceps were introduced. Both blades of Tarnier's forceps could not be gotten on. After several efforts I concluded that she could not be delivered in that way. In the morning the fetal heart was distinct, in the afternoon it was feeble.

The section was made without difficulty. The placenta was attached in front. The child could not be resuscitated. The placenta was readily detached and the uterus was cleaned out and closed by the Sänger method.

The operation was done on Friday, and the patient did well until the following Tuesday, when she sank rapidly, and died in a few hours. The woman had grave kidney disease, and had little chance of recovery on that account.

In this case several things are to be considered :

- 1st. The woman was perfectly willing for the operation.
- 2d. Her life, from the condition of her kidneys, was not insurable, and the child had a good chance of living.
- 3d. She had much difficulty in the former craniotomy, and barely escaped with her life.

Dr. ASHBY : I have had the good fortune to witness two Cesarean sections. One, the case of Dr. J. G. Jay, of this city, several years ago, and the recent case reported by Dr. Browne. I was impressed with the ease with which the operation can be done. Its mechanical execution is certainly much less difficult, than is necessitated by many intra-abdominal operations. Hemorrhage is easily controlled, and the closure of the uterine wound is not a difficult undertaking.

In the case of Dr. Jay, the mother made a prompt recovery, and the child perished simply because of the unavoidable delay which was experienced before an attempt at its removal was made. Its death had, in my opinion, no relation to the operation, but to causes which antedated the section. I am convinced in the case of Dr. Browne the child could have been saved had no other method of delivery been attempted.

Section, I think, bore no relation to its death. In this case the operation was skilfully done, and I am inclined to believe that the mother's death should be assigned chiefly to her kidney complications. She was a bad subject, but bore the section well. My opinion of Cesarean section is altogether favorable. It has come to stay, and with an improved technique and larger experience, will be approached with less hesitation.

The operation of the future will be approached without delay, and before other methods of delivery have been employed.

The important indication for the operation rests upon careful pelvic measurements and determination in advance of any obstetric interference of the improbability of delivery by version or forceps. If this is done, the section will be approached under its most favorable aspect and its results will be far more satisfactory.

I agree with Dr. Miltenberger in that personally I would prefer craniotomy, if the patient were a member of my own family, but upon scientific grounds, I would not hesitate to operate did my patient and her friends elect this procedure, having satisfied my own mind that a living child could not be born in any other way.

I think it unfortunate that the physician in charge of these

cases should not have the moral support of the public and profession in the selection of the section in advance of attempts at other methods of delivery. Out of deference to a sentiment, he often feels forced to use the forceps and version where his own judgment was in favor of the section. Valuable time is thus lost, and the lives of both mother and child endangered, if not sacrificed.

Dr. NEALE: As no points were raised against the paper, I have nothing to say in its defense.

I did examine Dr. Browne's case, and told how, in my opinion, it was no case for the section. The chief obstruction was in the soft parts, that in the pelvis was very slight, if any. I thought it possible to deliver the child alive, p. v. n., but was sure it could be readily extracted after craniotomy. Owing to the kidney complication, the mother was in a most unfavorable condition for the section, and for that matter the child also; therefore, I advised against this operation.

However, after once beginning a conservative delivery, p. v. n., which was persisted in too long (thirty minutes), I certainly never should have resorted to the section in that case, with both child and mother in the then most unfavorable condition, but would have delivered at once by craniotomy.

I totally and emphatically differ from Dr. Ashby, that any conscientious obstetricians should ever be forced to resort to craniotomy by the moral evasion of the patient or her friends. Such teaching would be extremely pernicious.

The sentimental question of what one should do if the patient were his wife, etc., is a matter of individual conscience and not open to scientific discussion before a medical society.

I again request the fellows not to let this matter rest where we leave it tonight.

I wish to emphasize the fact that I have purposely avoided any reference to the religious aspect of this question, as I do not believe this work is open for scientific discussion before a medical society.

"Is THE doctor in?" asked a tramp at the door of an Arch street physician recently. A few minutes later an oldish female came to the door. "I just wanted to see if the doctor wouldn't give me a pair of his old pants," said the tramp. "I'm the doctor," said the lady. The tramp had several attacks of vertigo as he dropped down the steps.—*Boston Journal of Health.*

Clinical Reports.

SURGICAL CASES TREATED AT THE HOSPITAL OF THE SISTERS OF CHARITY.

(SERVICE OF DR. MYNTER.)

REPORTED BY

J. HENRY DOWD, M. D., House Surgeon.

AMONG a large number of important operations lately performed at the Sisters of Charity Hospital, by Dr. H. Mynter, Professor of Surgery at Niagara University, the following deserve particular mention :

CASE I. *Partial Excision of the Sternum for Melanosarcom.* Mary F., 20 years of age, born in Ireland, entered the Sisters' Hospital on November 14, 1890, with the following history : She is a domestic and has been obliged to do a great deal of sweeping, during which the handle of the broom rubbed against the breast-bone. She ascribes her complaint — a tumor on the breast-bone — to this cause. The swelling first appeared eleven months ago, and has been growing larger steadily, till now it is the size of half an orange, and extends from above the third to below the fifth rib. Four months ago, the glands in the right axilla commenced to swell, and there is now found here a conglomeration of glands as large as two fists, completely filling the whole axilla, but yet somewhat movable. Two months ago the glands in the left axilla commenced to swell and are now as large as a hen's egg. During the last few weeks the glands in both supra-clavicular regions have commenced to enlarge. The tumor over the sternum is immovable, presents a feeling of false fluctuation ; the skin is normal in color and not adherent. She has sharp shooting pains radiating from the tumor in different directions, has lately commenced to lose flesh, but is yet in pretty good health. There are no symptoms of any growth in the anterior mediastinum, such as hoarseness, displacement of heart, difficulty of breathing or interference with circulation.

November 15th, under ether-narcosis, Dr. Mynter performed the following operation : U-formed incision, convex downwards, from second to sixth rib, about three inches wide. The flap was dissected up and the periosteum loosened from the sternum above the tumor in healthy tissue in order to shell out the tumor from the bone, if possible. The tumor was surrounded by a strong fibrous capsule. On a line of the fourth ribs the tumor extended into the breast-bone, and the capsule was necessarily opened here and there was a discharge of a semi-fluid,

black, grumous substance. The rest of the tumor was, therefore, removed from below upwards by a similar process. The sternum was found quite extensively diseased, presenting an irregular cavity as large as a section of a hickory-nut, filled with the same black, grumous substance. It was thoroughly scraped out with a sharp spoon. During this process, the posterior lamina of the sternum was perforated. The opening was enlarged with chisels and from this opening the posterior periosteum was loosened with a curved elevator and the sternum removed piecemeal with cutting pliers, from the third to the fifth rib, inclusively. About one-half inch of the third, fourth, and fifth right costal cartilages were removed, too, and the pericardium, which appeared healthy, exposed for about six square inches. The skin flap was thereafter brought into place, sutured, and a drainage-tube inserted from the lowest point into the cavity.

All enlarged glands were thereafter removed from both axillæ and supra-clavicular regions, drainage-tubes introduced, sutures inserted, and antiseptic dressings applied. The operation lasted about two hours. The further course was favorable. The temperature rose for a couple of days to 101 in the evening. She suffered for some days considerable pain when breathing, till she learned to use abdominal respiration. The drains were removed on the fifth day and on the tenth day the wounds were healed and the patient allowed to sit up. She left the hospital on the fourteenth day.

Dr. W. C. Krauss examined the tumor microscopically and declared it a melanosarcom. Only two similar cases are reported in the literature, one by Kœnig and another by Kiister. Kœnig tried to extirpate the sternum *in toto*, during which proceeding both pleural cavities and the pericardium were opened. His patient, nevertheless, recovered. This accident could scarcely happen if the operation is performed as in this case, *i. e.*, by trephining the sternum and removing the bone from the opening made with cutting pliers. So far, two months after the operation, no relapse has occurred, and the patient is greatly improved in health.

CASE II. *Double Castration, for Tuberculous Orchitis.* J. H., 50 years of age, entered the Sisters' Hospital on September 23, 1890, with the following history: Nine months ago he noticed that his left testicle was swelling. He is a contractor and has to ride a great deal over the rough pavement. He ascribes the testicular enlargement to injury from riding. The left testicle continued to grow larger and he consulted a physician, who punctured it for a hydrocele and injected tincture iodine. Four months ago the right testicle commenced to enlarge. On admittance the left testicle was found twice the size of normal, both the testis proper and the epididymis being enlarged. Two sinuses are present, through which a thick pus can be squeezed out. The

right side of the scrotum is much enlarged, too, but the testis can be felt almost normal in size, the enlargement being caused by a hydrocele. He complains of severe pains in the back and groins. The family history is good; he has no cough nor symptoms of cachexia, no swollen glands in the neighborhood. The vesiculæ seminales seem normal.

September 24th, under ether-narcosis, Dr. Mynter opened the tunica vaginalis testis on the left side, and found it transformed into a pus-cavity. After scraping away diseased tissue two sinuses were found leading into the gland. It was then decided to remove it, which was done, the cord, which appeared healthy, being ligated near the external ring. The hydrocele on the right side was thereafter tapped and carbolic acid injected.

Dr. W. C. Krauss, who examined the extirpated gland, reported it to be a tuberculous orchitis and epididymitis and full of tuberculous bacilli.

He left the hospital recovered on October 1st, but returned on October 25th with the right testis in the same condition, swollen, painful, and with abscesses forming in it. He requested its removal, too, stating that he was unable to work, had a large family (nine children) to support and could stand the pain no longer. The right testis was, therefore, removed in a similar manner and the patient left recovered on November 1st, the wound being almost healed.

He returned again on December 6th on account of a considerable swelling, as large as a hen's egg, in the inguinal canal on the right side and a sinus on the same side, through which a little pus could be squeezed out. Under narcosis an extensive operation was performed, the inguinal canal being opened along its whole length to the internal ring and the tumor, which was a relapse along the cord, carefully dissected out. The inguinal canal was thereafter closed with strong cat-gut sutures. He left the hospital recovered on December 22d and has been well since.

The case is of importance on account of the patient's age, tuberculous orchitis generally occurring in early manhood, and on account of the rapid development of the disease.

CASE III. *Spina Bifida*. Alice H., three weeks old, admitted November 12, 1890, with her mother. The baby, who is healthy-looking and with no other deformities, has a tumor, the size of a hen's egg, over the lumbo-sacral articulation covered with normal but very thin and tense skin and, apparently, being a pure meningocele. As the tumor was enlarging rapidly, it was considered best not to delay the operation in spite of the extreme youth, her age being only three weeks. Dr. Mynter therefore injected, without previous tapping, ʒi . of Morton's fluid (Iodine, gr. x.; Iodide Potash, ʒi .; Glycerine, ʒi .) into the tumor, and painted the seat of puncture with collodium, over which

firm pressure was applied. Some restlessness and coryza noted for some days. The child left the hospital on November 15th.

December 25th it was brought to the hospital, and the tumor was found to have entirely disappeared, its place being occupied by a dense cicatricial tissue.

This method offers by far better prospects of cure than excision, the percentage of recoveries being about 50 per cent. Two months is considered the limit of age, but that it may be safely done much earlier is well shown by this case.

CASE IV. *Resection of Maxilla Inferior.* D. H., 58 years of age, was admitted October 29, 1890, with the following history: About four months ago, while working in his blacksmith-shop, the handle of his hammer recoiled and struck him on the lower jaw. Since that time the body of the jaw has gradually enlarged and is now occupied by an epithelioma almost the size of a man's fist, and involving besides the whole body of the jaw from angle to angle a large part of the lower lip, the sublingual and submaxillary glands and the under surface of the tongue. The tumor gives him a peculiar appearance, his face being very much lengthened. His breath is extremely offensive, and a very fetid discharge is continually secreted from the mouth. He complains of intolerable pains radiating along his cheeks to the temples. Extensive cancerous ulcerations are seen and felt beneath the tongue. He is very much emaciated and cachectic from inability to swallow and from loss of sleep; there is marked calcification of the radial arteries and a large arcus senilis over both eyes. Both on account of this and of his general weak condition, operation was discouraged and the patient was honestly told that he probably would not survive an operation. As he, nevertheless, insisted upon taking his chances and have an operation performed, Dr. Mynter operated in the following manner: After preliminary tracheotomy, and after having plugged the pharynx with a large sponge, he split the lower lip and chin to the hyoid bone, dissected the healthy tissues away and severed the lower jaw with a chain-saw near both angles. Thereafter, turning the severed jaw downwards, he removed with scissors the whole cancerous mass, including the lower surface of the tongue and both submaxillary glands. The skin-flaps were thereafter sutured, with the exception of an opening near the hyoid bone, through which a drainage-tube was introduced. The tracheal-tube was removed on the twelfth day, the patient then being able to breathe through the mouth. He was nourished for four weeks with the stomach-tube, but is now able to swallow pretty well, although the rest of the tongue, by cicatricial retraction, is firmly drawn down to the floor of the mouth. His long face has been changed into a round, oval one, so that his best friends would scarcely recognize him. He has gained greatly in weight and strength, is free from pain, and able to enjoy life with comparative comfort.

CASE V. *Scirrhus of Rectum, and Excision of Rectum.* J. M., 41 years of age, was admitted on October 5, 1889, with the following history: He has for two years noticed hemorrhage from the bowels with every passage, preceded by an itching and burning sensation in the rectum. Last Summer he noticed that the passages became more frequent and accompanied not only with blood, but also with mucus, and with a painful sensation in the rectum as if he did not empty it completely. He was treated for piles by several physicians, but without any improvement. On examination a hard, firm lump, as large as a dove's egg, was found in the left half of the rectal wall including the sphincter and anus. Under ether-narcosis Dr. Mynter extirpated a rectangular piece of the rectum and anus including the tumor. About one-half of the circumference of the rectum was removed. The wound healed kindly and the patient was discharged in three weeks.

December 2, 1890, the patient was readmitted, complaining of pain and uneasiness in the rectum. He has felt perfectly well for a whole year, but the symptoms lately having reappeared, he returns for examination. A hard lump, as large as a hen's egg, was felt in the unremoved right half of the rectal wall, extending upwards almost three inches, and so immovable or firmly attached that it seemed to spring from the pelvic wall. Under ether-narcosis the right ischio-rectal fossa was opened by a large incision between the anus and tuberositas ischii. With much difficulty the tumor was loosened from the prostate and dissected loose from the surrounding tissues. It was not attached to the pelvic wall, but extended almost four inches upwards, and was removed with a good deal of difficulty and under profuse hemorrhage, more than thirty arteries being ligated in the wound, among which was the arteria pudenda communis. The vesico-rectal fossa was opened, and three or four nuckles of the small intestines prolapsed through the wound. The prolapsed intestines were replaced, three or four sutures taken in the cut end of the rectum and the peritoneum and two large drainage-tubes introduced into the vesico-rectal fossa. A very large tube, surrounded with iodoform gauze, was introduced into the rectum, and the whole wound firmly plugged with iodoform gauze around this tube. He vomited considerably for twenty-four hours and complained of pain in the abdomen, which was relieved by hypodermic injections of morphia; but the temperature did not rise above 101°, and was normal from the fourth day. The two smaller drainage-tubes were removed after forty-eight hours, the large one first on the tenth day, when firm adhesions were supposed to have taken place. His bowels were then opened by castor oil, and the use of daily hip-baths commenced. The large cavity filled up rapidly, and the cut end of the rectum was drawn down by the cicatricial retraction. He was out of bed in three weeks, and has since continually gained in strength. There is, of course, no

control over the bowels, even the third sphincter having been removed. In order to prevent too much stenosis, a large rectal bougie is introduced daily.

[In a similar case I should think preliminary resection of a part of the sacrum, after Kraske's method, advisable. It gives a great deal more space and makes the operation easier, when the disease extends up to or above the vesico-rectal fold. Another point learned by this case is the necessity for local examination in all cases with symptoms of rectal disease. The diagnosis of piles is too often made without a local examination and cases of cancer overlooked, which might have been easily removed in the start and with a fair prospect of permanent cure.—H. M.]

CASE VI. *Double Osteotomy, on account of Bow-legs.* S. O., 25 years of age, born in England, was admitted on June 23, 1890, with the following history: Up to four years of age his legs were normal; but since then there has been a gradual bowing out of the knees and upper half of the tibia till twelve years of age, when the deformity ceased to increase. By examination a very peculiar deformity is seen. When his feet are placed together, both legs seem to form an arch, convex outwards, from the hips downwards, the inner measure between the knees being sixteen inches. If the knees are brought together, the feet and lower ends of the tibia cross each other, and the feet are over a foot apart crosswise. The curve is almost in the tibia and fibula alone, the femora being almost straight. A compensating curve, convex inwards, is seen in the lower third of the tibia, and as a further compensation both feet are in extreme *per valgus* position.

Under ether-narcosis, subcutaneous osteotomy, with Adam's saw, was performed on both tibia at the lowest end of the upper curve, the bones being sawn three-fourths through, the rest and the fibulae then being fractured by direct force. The legs were thereafter straightened and put in plaster-of-Paris, an antiseptic bandage having first been applied. The feet were forced into a *per varus* position. August 26th the patient was discharged with good union and greatly improved in appearance, the inner measure between the knees now being only four inches.

THE *Albany Medical Annals* will, in the future, be conducted by the Albany Medical College Alumni Association, Dr. W. G. McDonald acting as editor. It will continue, as heretofore, the representative of the Alumni of Albany Medical College.—*St. Louis Medical and Surgical Journal*.

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY

A. A. HUBBELL, M. D.,

Professor of Ophthalmology etc., Niagara University.

SOME POINTS OF CONNECTION BETWEEN THE EYE AND THE CARDIO-VASCULAR SYSTEM.

IN A PAPER recently read before the Harverian Society of London, (*British Medical Journal*, November 15, 1890,) Dr. Batten endeavors to show that hypermetropia and myopia are associated with other structural conditions, especially in the cardio-vascular systems, and that, consequently, hypermetropes and myopes are liable to be differently affected by disease. Optic neuritis, for example, is of extreme rarity in myopia, while its occurrence in hypermetropia is very common, and this he considers not due to local causes only, but to general conditions. In the young hypermetrope, the pulse is quick, easily accelerated, and varies rapidly, but not apparently so much with the degree of manifest, as with latent, hypermetropia. In high hypermetropia, with bad vision, the pulse is often a markedly slow one. The tension is low. The heart apex is often inside its normal position, and the first sound of the heart is generally accentuated. Murmurs, of a variable and functional character, frequently occur. Loud atypical systolic murmurs and heart-sounds, resembling those found in chorea, are also met with. In elderly hypermetropes, he considers high-tension pulse and cardiac intermission and irregularity of frequent occurrence. The action of atropine (in the eye.—H.) in slowing the quick hypermetropic pulse, is very marked, and correction by glasses often had the same effect. In myopia, the pulse is generally slow, except in progressive cases, when it is usually rapid. There is accentuation of the second heart-sound, and the tension of the pulse is raised. He regards myopia as a kind of rickets, depending upon a constitutional cause, which affects also the cardio-vascular system. He urges that in the treatment of myopia, sufficient importance is not attached to the constitutional portion of the disease. He concludes: (1.) There is an intimate connection between the eye, in its muscular, nervous and vascular structure, and the cardio-vascular system, both in health and disease. (2.) As regards the hypermetropic form of circulation, partly struc-

tural and partly functional, this form of circulation is liable to influence the type of disease in the individual, and gives rise to cardiac irritation and functional disease, leading to malnutrition. (3.) As regards myopia, the changes which lead to it produce also a change in the circulation, partly structural, partly functional, and that the form of circulation, so produced, appears to render the individual less liable to some, and more liable to other, forms of disease.

ARTHRITIS, FOLLOWING PURULENT CONJUNCTIVITIS.

DEUTSCHMANN (*Arch. f. Ophthalm.*, xxxvi., part i.,) reports two cases of arthritis, following conjunctivitis neonatorum. He also refers to several cases reported by other observers. In all cases in which any statement was made, the third week was given as the time at which the joint affection appeared. The similarity, in clinical aspects, between these cases of arthritis, following conjunctivitis neonatorum, and that which occurs in the course of gonorrhea, is manifest and strongly indicative of the pathogenetic identity of the two inflammations.—*Oph. Rev.*, Nov., 1890.

TREATMENT OF IMMATURE CATARACT BY MANIPULATION, CONJOINED WITH INSTILLATION.

DR. R. KALISH, of New York, proposes a new method of treating immature cataract (*Medical Record*, Mar. 29th, and Dec. 20, 1890). The instillation consists of equal parts of a one per cent. solution of boracic acid in rose water and glycerine. The proportion of glycerine is diminished, if its use causes too much irritation, lasting five to twenty seconds, or increased to double the amount of boracic acid solution, if there be no irritation. Each successive application, as a rule, causes more smarting. Conjoined with this instillation, a form of manipulation is conducted as follows: The patient, seated in a chair, and the operator standing or sitting behind, two drops of the solution being introduced into each eye, he "places both hands over the closed eyes, so that the tip of each middle finger rests upon the eyeball at its nasal side, the index and ring finger falling into place beside the middle finger. With slight pressure upon the eyeball the three fingers are drawn outward over the eye to the temporal side. This procedure is repeated twenty to thirty times a minute, the stroking being in one direction only, and

continued for ten minutes, when a second instillation of two drops into both eyes should be made, manipulation carried on as before for ten minutes; then a third instillation, followed by manipulation for ten minutes. . . . This treatment is to be continued daily for a week, and then the interval between the instillations lengthened to fifteen minutes." The treatment should be continued for three or four months.

Upon his experience in the treatment of twenty-four cases, he formulates the following conclusions: "(1.) Further investigations are necessary before a decided opinion can be expressed as to the result of this treatment of immature cataract. (2.) Immature, uncomplicated cataract can be benefited to the reacquisition of reading power, that is, to good, useful vision. (3.) Incipient cataracts, and those which have but passed into a state of immaturity (!) can be entirely absorbed (?). (4.) This being so, the sooner a cataract comes under treatment, the better the result obtained. (5.) The effect produced . . . is permanent."

FOREIGN BODIES IN THE EYE.

DAVID WEBSTER lays down the following rules: (1.) Always search carefully for foreign bodies on the cornea and on the conjunctiva, in cases of inflammation of one eye coming on suddenly and without other apparent cause. (2.) Remove them, when found, with as little injury as possible to the surrounding parts. (3.) When a foreign body is lodged within the eyeball, especially in the ciliary region, the patient is in danger of losing the fellow-eye by sympathetic inflammation, whether the foreign body is removed or not. The removal of the foreign body greatly lessens such danger. (4.) If the foreign body has already destroyed the sight, the eye should be enucleated without delay. (5.) If sympathetic inflammation sets in, the sooner the eyeball containing the foreign body is enucleated (unless it has servicable vision.—H.) the better will be the patient's chances of retaining useful sight. (6.) If the fellow-eye is attacked with symptoms of severe *sympathetic irritation*, the eye containing the foreign body (if vision in it is lost.—H.) should be enucleated without waiting for actual sympathetic inflammation. (7.) The magnet is serviceable in cases where the foreign body is of attractable material and *can be seen*, and is not firmly embedded in the eye-wall, or encapsuled with organized lymph. (8.) Where the foreign body is small, and its lodging-place is uncertain, the

introduction of a magnet into the eyeball is generally to be deprecated. (9.) After the foreign body has been *extracted* from the interior of the eye, the patient should be warned that sympathetic inflammation may occur, and, in such a case, should not be neglected. —*Medical Record*, Nov. 8, 1890.

TREATMENT OF HIGH DEGREES OF MYOPIA BY REMOVAL OF THE LENS.

DR. FUKALA, of Pilsen-Karlsbad, (*Arch. für Ophthal.*, xxxvi., p. 230; see, also, *Ophthalmic Review*, October, 1890, p. 304; and full translation in *Am. Jour. Ophthalmology*, November, 1890, p. 347,) has, during the past three years, treated twenty-three cases of myopia by removal of the crystalline lens, the object being to diminish the refractive power of the eye by taking away that of the lens, which amounts to 15 to 16 dioptries. The myopia, in these cases, ranged from 11 to 20 dioptries. The oldest patient was 24, the youngest 8. In all, the fundus of the eyes presented a "normal ophthalmoscopic appearance, the crescents ('myopic') being small, or, at most, one-third of a pupillary diameter wide." The state of vision varied from $\frac{1}{2}$ to $\frac{1}{3}$ before treatment, and in every case in which the treatment had been completed (nineteen) it was much improved. The method of treatment was discission of the lens and its absorption. In some instances the discission was repeated as many as fifteen times. In one case, an incision was made in the cornea, and the lens-matter extracted. Some cases were treated without, and some with, iridectomy. The time of treatment varied, in most cases, from three to twelve months. Eyes which were 15 d. to 16 d. myopic were made emmetropic by the treatment, and required no glasses afterwards for distance, while those less myopic needed a corresponding convex glass, and those more myopic, concave glass. The power of accommodation was, of course, lost by taking away the lens, and a glass of 3 d. to 4 d. greater refraction was required for reading in all cases whose myopia was finally changed to emmetropia or hypermetropia, or less than 3 d. to 4 d.

This treatment was pursued under the greatest precautions, and only on young people "with relatively good visual activity, who could read Jæger No. 1 at their *punctura remotum*, and whose fundus presented no choroidal or retinal disease." As the absorption of the lens is not practicable in elderly people, it must be extracted,

although the writer had not yet done it. Still, he believes "that with the advances made in the present day, the extraction of the clear lens in high-grade myopia will yield the best results." The advantages which are claimed for this method of treating myopia of high degrees: enlarged retinal images; great improvement of vision for distance; relief of strain and spasm of accommodation, and recession of the far-point, thus reestablishing binocular vision, which was before impossible on account of the excessive convergence necessary.

NEUROLOGY.

CONDUCTED BY

W. C. KRAUSS, M. D.

IN A REPORT on the examination of one hundred brains of feeble-minded children, made by A. W. Wilmarth, of Elwyn, Pa., in the *Alienist and Neurologist* for October, 1890, the following conditions were found: Sclerosis with atrophy, 12; sclerose tuberculeuse, 6; diffuse sclerotic change, 7; degenerative changes in vessels, ganglionic cells or medullary substance, not constituting true sclerosis, 15; hydrocephalic, 5; general cerebral atrophy, 2; non-development in various forms, 16; infantile hemorrhage, 1; extensive adhesion of membranes from old meningitis, 3; angiomatous condition of cerebral vessels (with degenerative changes), 1; glioma (with sclerosis), 1; porencephalous (with non-development), 1; of thirty-one cases where the actual disease or imperfect development of the brain proper was not demonstrated, there was hypertrophy of the skull, 6; acute softening (recent), 2; demi-microcephalic, 2; when the brain was above usual weight, but the convolutions large and very simple in their arrangement, 2.

HYPNOTISM IN ITS RELATION TO SURGERY.

DR. LANPHEAR, of Kansas City, reports a case of double talipes, in which the subject had chronic Bright's disease which contra-indicated the use of ether, and at the same time he had an organic heart trouble which presented the safe use of chloroform. The patient wanted to be operated upon, and Dr. Lanphear hesitated to give the ordinary anesthetic, and so hypnotized him. Contrary to the generally accepted idea that at the first seance a sufficient degree of anesthesia cannot be produced to perform an operation, the doctor got a sufficient degree of anesthesia by suggestion by which he

performed the operation for talipes, and the patient lay upon the table as fixed and immovable as marble during the whole operation.—*Cincinnati Medical Journal*.

Therapeutic Notes.

THE ELECTRIC LIGHT AS A THERAPEUTIC AGENT.

IN THE *Revista de Ciencias Medicas*, Dr. Estanislao von Stein reports a number of neurasthenic, hysterical, and rheumatic affections successfully treated by illuminating the surfaces with the electric light. His apparatus—"Fotoforo"—consists of an incandescent light of twelve volts, supplied with an infundibuliform reflector and a handle. Illuminating a painful joint or nerve, as sciatica, for two to five minutes, has yielded him surprising results. The alterations, especially of the nerves, which takes place are probably of a molecular character.

DR. KIANOUSKI, in an article on the Microbicide Action of the Gastric Juice, comes to the following conclusions: The empty stomach of a healthy man contains innumerable organisms. The gastric juice, and principally the hydrochloric acid, possesses microbicide properties. The microbes take no active part in digestion. Persons who, on account of some affections, secrete little hydrochloric acid, are easily intoxicated, by means of the microorganisms in the stomach. Therefore, the stomach should not remain in an empty condition for any length of time, and during an epidemic, food should be taken at frequent intervals, and, if possible, sterilized.

ON THE action of caffeine, morphine, atropine, ergot, and digitalis upon arterial pressure, by Dr. S. Frenkel, in *Deutsches Archiv. f. Klin. Medicin*, by means of Basch's sphygmograph, the author was enabled to arrive at the following conclusions: Caffeine, administered internally, 50–80 centigrammes daily, increases arterial pressure, and acts like digitalis. Hypodermic injection, 10–80 c.g., raises the intravascular pressure rapidly, and is consequently indicated in collapse due to cardiac disease. Morphine, injected hypodermically, 1–3 c. g., increases the intravascular pressure slightly. Frequently, however, this effect is not noted. Theoreti-

cally, therefore, morphine is not contra-indicated in cardiac affections. Atropine, injected hypodermically $\frac{1}{4}$ –1 milligram, elevates the arterial tension from 20 to 25 millimeters. The pulse is accelerated. No change is observed in the quantity of urine passed. Ergotine, after an interval of two to three hours, provokes an elevation of arterial pressure from 20 to 30 millimeters. Generally the pulse is rendered slower but more forcible. Digitalis, given to patients suffering with cardiac affections, has yielded classical results analogous to those obtained when injected hypodermically in animals.

UP TO December 9th, Professor Dujardin-Beaumetz, of Paris, had inoculated five cases of tuberculosis, with results in conformity with Koch's assertions. From the experiences of such investigators as Dujardin-Beaumetz, the medical world should wait before drawing conclusions.—*Revue General de Therapeutique*.

DR. PEAN's results with Koch's lymph (*Le Progrès Médical*, December 13th,) are summed up as follows: Notable amelioration of local lesions; suppurations tend to diminish; fistulous tracts are closing; ulcerations are granulating nicely; but, as yet, no real cure has taken place.

BEFORE THE Academy of Medicine, of Paris, Dr. Boisseau du Rocher read a paper on Internal Franklinisation in Neurasthenia. In dilatation of the stomach, excellent results have been obtained by the production of ozone and by stimulating the secretions. Furthermore, the electric charge penetrates the tissues, keeping them at their maximum intensity under a constant electric pressure, thus reëstablishing the equilibrium of the nervous system.—*Le Progrès Médical*.

IN THE *Bulletin Général de Therapeutique* are given the following formula for using Iodol, the new antiseptic:

SOLUTION.		INHALATION.	
Iodol.....	1 part.	Iodol.....	1 part.
Alcohol, 95 per cent....	16 parts.	Alcohol.....	15 parts.
Glycerine.....	34 parts.	Glycerine.....	10 parts.
		Water.....	10 parts.

COLLODION.

Iodol.....	1 part.
Ether.....	10 parts.
Gun cotton.....	5 parts.

POMMADE.

Iodol.....	2 grammes.
Vaseline.....	10 grammes.

POMMADE.

Iodol.....	5-10 grammes.
Lanoline.....	100 grammes.

IN a man suffering from well-marked typhoid fever of ten days' standing, a writer in the *Lancet*, June 21st, states that, thinking this a good case in which to try the remedy, he sent the man home to bed, and ordered him *b*-naphthol in four-grain doses every third hour. The medicine was given in capsules. His symptoms, which were very severe and well marked, at once began to ameliorate, and he was soon convalescent. He adds, there can be no doubt about the marked good effect of naphthol in typhoid, as also in Summer diarrhea and dysentery.—*Canada Medical Record*.

IN *Northwestern Medical Journal*, Dr. Crone treated fourteen out of eighteen cases of diphtheria successfully as follows: Quinia, sulphur and boric acid, equal parts, insufflated every two hours. The following day the swelling had partially subsided, and the membrane began to disappear. Convalescence in from five to seven days. In addition to this treatment pot. chlor. and tinct. ferri chlor. and brandy were administered.

TWO drops of creasote made from beech tar, given with a little water, is said to be a specific for hiccough arising from drunkenness.—*Lancet-Clinic*.

WHEN a silver catheter is blackened by the urine, it denotes the presence of pus in the bladder, which generates sulphuretted hydrogen.

FOR the treatment of eczema, a writer in the *Cincinnati Lancet-Clinic* advises an ointment composed of oil of pine tar, ℞j.; vaseline, ℞j.

Selection.

SOME NOTES BEARING ON THE ADMINISTRATION OF IRON.

By JOHN AULDE, M. D., Philadelphia, Pa.

ALTHOUGH iron is highly esteemed as a medicament, and is largely used for its tonic effect upon the system, so frequently does it occur that the patient objects, owing to some idiosyncrasy or fancy, that we cannot regard it wholly as an ideal hematinic. No apology, therefore, is required in offering to the profession a comparatively recent preparation, which is free from some of the objections that have been urged against many of the iron preparations now in use. In order to make the reasons which I have to offer clear and distinct to the casual reader, I have deemed it wise to consider briefly some points intimately connected with the pharmacology of the drug. From this preliminary study we shall be in a measure prepared to estimate how nearly the new product comes to meeting the defects with which we have had to contend so long, and at the same time it may possibly lead to a more intelligent use of this well-known remedy.

Besides the reduced iron, we have in general use the ferric and ferrous preparations, the latter being more mild, less astringent, and free from the objections to the ferric salts—that of coagulating albumin. Lethal doses of the ferric salts used intravenously, in experimental investigations, cause almost immediate paralysis of the central nervous system, fall of blood-pressure, and death. Although the perchloride, when thus used, causes instant death by coagulation of the blood, it does not act in this direct manner when introduced subcutaneously; the nerves are unaffected, but at the points of elimination inflammatory action is set up, *e. g.*, the kidneys, liver, and intestinal mucous membrane show more or less effect.

Absorption takes place as a peptonate or albuminate, but it is taken up so slowly that no appreciable result follows, unless, as just stated, it may be used intravenously or subcutaneously. Absorption takes place more rapidly in catarrhal conditions of the intestinal tract—a fact to be borne in mind when exhibiting large doses, which cause gastro-intestinal catarrh. Small doses do not have this effect, nor does the metal appear in the urine from their admin-

istration, such as may be observed after the ingestion of large doses. It will be inferred from the foregoing that by the exhibition of small doses of a soluble preparation of iron it will be assimilated without causing derangement of the alimentary tract, and in this way the secondary effects, *i. e.*, the deposit of the metal in the system, may be avoided.

The fact should be kept constantly in view, that metals have a poisonous action upon nerves, nerve-centres, muscles, and upon all glandular structures; and as iron is a reputed hematinic, much harm may result from its injudicious employment, as there are evidently certain toxic effects following the long-continued use of insoluble preparations. This is a rule which applies especially to all insoluble iron preparations, and it is but reasonable to assume that, whatever harm has been done through this means, may have escaped attention, because few physicians are likely to investigate the presence of factitious diseases. Another factor which has contributed to lessen these evils, is the slow process of absorption.

The foregoing observations apply with equal force to the effects of the drug upon the circulatory apparatus. While copper is an active agent in causing contraction of the blood-vessels, iron produces slow contractions, showing that it is less irritant (stimulant) to the nervous system. This may possibly be accounted for on the hypothesis that iron is a normal constituent of the blood. Whether this effect is due to irritation (stimulation) of the vaso-motor nerves, central or peripheral, or to a direct action upon the muscular walls of the blood-vessels, is a question still in doubt. My own impression is, that through the influence of the medicament upon the nerve-cells the large doses, comparatively, arrest their function, when contraction of the muscular structures in the vessels takes place. The ferric salts, owing to their property of coagulating albumin and blood, of course, produce more marked effects than the ferrous salts. Digitalis and ergot among the organic, and barium chloride among the inorganic, remedies, well-known as vascular tonics, furnish apt illustrations of this important principle.

Iron has a tendency to accumulate in the liver; small doses do not show this tendency, but they may serve to increase the functional activity of this organ, when given in a soluble, non-astringent form, by restoring cell-nutrition to the normal.

The effect of iron upon muscular structure has long been known to experimental physiologists, but I doubt if this knowledge is appreciated by many practitioners, who regard the possible benefits

to be derived from the exhibition of iron preparations in proportion to the amount tolerated by the patient. Now, large doses, while they do not affect the irritability of muscular structure, lessen materially the amount of work it is capable of performing, while small doses increase the capacity of muscle for work. What is most to be desired, therefore, is a preparation not open to the objections inferred from these investigations; but owing to the necessity for consulting the palate of our patients, it is also desirable that the substance should be free from the nauseating effects which are so common to all preparations of iron. The combination, I believe, is to be found in that form known as levulose ferride, which was highly recommended to me several years ago by my friend, Dr. James Collins, of this city.

The preparation known as levulose ferride is one which takes the place of a well-known and popular German product, called *Eisenzucker* (iron sugar), very extensively used in domestic practice. I was led to the employment of iron-sugar on account of its palatability, fastidious patients and children making no objections to it: but this has been supplanted by levulose ferride, which in the form of tablet triturates will be taken as readily as chocolate bon-bons. It is readily soluble in an excess of water, and practically free from any ferruginous taste or styptic effect when dissolved in the mouth, and is substantially a peptonate. The method of preparing it is briefly as follows: To a certain amount of iron a measured quantity of malt-sugar (maltose) is added, and the mixture constantly stirred while exposed on a water-bath. While it possesses all the desirable qualities mentioned, the presence of metallic iron may be determined by chemical analysis, the strength of the product being about three per cent.

This preparation, it will be apparent, will act much less actively as an astringent than even the ferrous preparations; but, of course, it cannot be expected to take the place of the ferric products, which are sometimes demanded, as in the case of intestinal parasites (*sarcina ventriculi* and *lumbricoides*). On the other hand, it will be especially indicated for the relief of anemia and chlorosis, owing to its ready absorption, lack of astringency, and its palatability. In all cases of defective nutrition, from any cause, where the ingestion of any form of medicament is a trial to the patient, this product will be kindly received. A synopsis of some of the cases in which it is indicated, together with a summary of the effects following its employment, may prove interesting to the physician.

During the early Summer months, I had under observation a young mother with a six-months' old child, who presented a very anemic condition. I had seen her but once since the delivery of her child, and anticipating that she would not be able to nourish it sufficiently and maintain her health, I had cautioned her in regard to the most appropriate diet. Notwithstanding every care had been used, she was finally compelled to seek medical aid, or go to bed. All that this patient required was something for the purpose of increasing the amount of hemoglobin, which would restore the integrity of the red corpuscles and improve the oxygen-carrying capacity of the blood. This being most readily accomplished by levulose ferride, she was ordered to take tablets of this preparation, each containing three grains, after meals. To meet the emergency, and increase the patient's strength, until such time as the advantages of the iron would be apparent, small doses of strychnine (one-sixtieth grain) were administered along with the iron. Ordinarily, this class of patients, when they begin in the early Summer, suffer more or less from the effects of heat, and become regular patrons of the doctor; but this patient did not make her appearance again for about two months, when she said she thought it was about time to have a little more of the same medicine. I may mention in passing, that the first medicine was sufficient only to cover the first ten days, and the patient seemed greatly disappointed that she was compelled to return.

So many children are so promptly benefited by the use of a small quantity of iron, that it is a great drawback to us that no palatable preparation has been discovered and put on the market. I have in mind a little fellow, who has long been very much adverse to eating meat, due, I presume, to defective digestion; but for the past few weeks, since he has been taking the levulose ferride, he seems quite content to eat meat alone, and is becoming strong and robust. Not long ago I had a visit from a lady, who brought with her a young lad, aged fourteen, who had a most forbidding cadaveric expression, and he could eat no meat. His brother, I was told, had died about his age from Bright's disease, and this one presented all the symptoms peculiar to the brother who died. Still, with attention to diet, outdoor exercise in the country, and a tablet triturate containing three grains of levulose ferride after meals, he made a prompt recovery. Although I was unable to discover any symptoms of Bright's in this instance, I was impressed with the depression due to the anemic condition; and yet, without some

readily assimilable iron preparation, it would have been a tedious process to start him on the way toward recovery.

Late in the Spring of the year, a gentleman, aged about thirty-five, called on me, complaining of dyspepsia, although he had been under the treatment of another physician for overwork for the preceding four years. After regulating his diet, and adopting treatment calculated to restore the activity of the digestive apparatus, he was placed upon levulose ferride along with strychnine sulphate—three grains of the former in tablet form, and one-sixtieth grain of the latter, and did remarkably well on this combination. This product, like all other mild preparations of iron, is mostly indicated in cases of this class, and along with these may be mentioned chorea, convalescence from lingering diseases, like typhoid fever; and in all such instances, I venture to anticipate that the results will be especially favorable where proper attention is given to the dietetic measures.

The administration of the remedy may be confined to the use of the powder, which is taken dry on the tongue, dissolved in water or coffee; or it will be found more convenient in the form of tablets, each containing three or five grains. The dose for children ranges from three to ten grains, and for adults from five to thirty grains.

The Levulose Ferride was obtained through Messrs. Eisner & Mendelson Co., of New York, who import this article.—*New England Medical Monthly*.

A CHINESE HOSPITAL IN BROOKLYN.—The articles of incorporation have been filed at Albany for a Chinese Hospital Association, to be located at Brooklyn. Clergymen and physicians of that city chiefly constitute the board of directors. It will be exclusively for the use of Chinamen, and it is not expected to receive contagious cases.—*St. Louis Medical and Surgical Journal*.

"I MOVE to lay it on the table," said one of the medical students on their return from a "lifting" expedition; and the subject was promptly "tabled."—*St. Joseph Medical Herald*.

QUIZ:—Student enumerating some of the local edemas: Hydrothorax, hydrocephalus, hydrocele—hydrophobia. Class applauds.

PICROTOXIN in doses of one-sixtieth of a grain is excellent in checking the exhausting night sweats of phthisis.

BUFFALO MEDICAL AND SURGICAL JOURNAL

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Editorial.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE eighty-fifth annual meeting of this Society, held in Albany, February 3d, 4th, and 5th, was both notable and interesting. The attendance was large, the scientific work excellent, and harmony was manifest on all sides. There were present distinguished guests from several states and Canada, who participated in the proceedings, giving additional interest to the meeting.

Drs. L. S. McMurtry, of Louisville, and Fayette Dunlap, of Danville, represented Kentucky; Dr. W. E. B. Davis, of Birmingham, represented Alabama; Dr. Charles A. L. Reed, of Cincinnati, represented Ohio; Drs. E. L. Shurly, of Detroit, and Heneage Gibbes, of Ann Arbor, represented Michigan; Dr. Francis Bacon, of New Haven, represented Connecticut; Drs. A. H. Wright and Jas. F. W. Ross, of Toronto, represented Canada; Drs. W. W. Keen and E. E. Montgomery, of Philadelphia, represented Pennsylvania.

The discussion on Tuesday evening upon Appendicitis was a brilliant surgical symposium, in which eight or ten of the prominent surgeons both from within and without the State participated.

A special interest centered around the fact that at this meeting the first State Medical Examining and Licensing Board was to be nominated. It was apprehended that the selection of the names to compose this Board would lead to discussion that might occupy time properly belonging to the scientific work, hence it became a matter of considerable importance to so dispose of this great duty as to properly represent the dignity of the Society as

well as economize time. A representative committee was happily chosen to nominate fourteen names to the Regents of the University, seven of whom are to compose the Board, and it is difficult to see how this committee could have performed its duties in a more satisfactory manner. Certainly the committee should feel great satisfaction in having its work unanimously indorsed by the Society. These nominations are as follows: Dr. W. C. Wey, Dr. B. F. Sherman, Dr. W. W. Potter, Dr. W. S. Ely, Dr. Geo. F. Shrady, Dr. J. P. Creveling, Dr. L. S. Pilcher, Dr. Edward B. Angell, Dr. Geo. R. Fowler, Dr. H. D. V. Pratt, Dr. C. L. Dana, Dr. Eugene Beach, Dr. V. P. Gibney, and Dr. M. J. Lewi. The several parts of the State have been geographically considered in the selection of these names, and the interests of the Society as well as the profession at large seemed to have been well conserved thereby.

The social features of the meeting were unusually pleasant, and deserve to be mentioned. Dr. Vander Veer's dinner to the Ex-Presidents of the Society on Monday evening, at the Fort Orange Club, and to which out-of-the-State guests were also invited, was a fitting commencement to the meeting, that will be remembered as one of the best in the history of the Society. A number of private dinners followed on Tuesday evening, and the Society's banquet on Wednesday evening was a suitable *finale* to the unofficial part of the gathering. At the latter two hundred and fourteen covers were laid, and the proprietor of the Delavan, Mr. Roessle, pronounced it the largest medical banquet ever given in Albany.

The Speaker of the Assembly, Honorable Wm. F. Sheehan, graced the banquet with his presence, and made a witty and eloquent speech that won the plaudits of the banqueters.

The officers chosen for the ensuing year are: President, Dr. A. Walter Suiter, of Herkimer; Vice-President, Dr. W. W. Crandall, of Allegany; Secretary, Dr. F. C. Curtis, of Albany; Treasurer, Dr. C. H. Porter, of Albany. Dr. H. R. Hopkins, of Buffalo, was retained on the Committee of Ethics, Dr. Edward Clark, of Buffalo, was appointed a member of the Committee on Hygiene, and Dr. A. E. Persons, also of Buffalo, on the Committee of Publication.

NOTES AND ECHOES OF THE MEETING.

The Special Committee to nominate the State Examining and Licensing Board were: Dr. D. B. St. John Roosa, Chairman; Dr. John O. Roe, Secretary; Dr. B. F. Sherman, Dr. Henry Flood and

Dr. D. V. O'Leary. After two days' hard work in considering this subject in all its phases, the Committee reported at five o'clock, P. M., Wednesday, and the Society unanimously confirmed the names presented. The Society is to be congratulated on the work of this Committee, and the latter deserves the thanks of the Society as well as of the profession at large.

The annual banquet of the Society, on Wednesday evening, at the Delavan House, was a picturesque and delightful grouping of physicians, clergymen, lawyers and legislators. The speeches were bright, brief and pointed, while the sallies of wit were refreshing and convulsing. Mr. Theodore Bacon, of Rochester, who was present by incident of travel, spoke for the lawyers, and rarely has a more entertaining speech been heard on such an occasion.

The Business Committee deserves great credit for its management of the scientific work, which falls to its lot under the by-laws. Rarely has so much material been disposed of in the time allotted, and with so little friction, or expressed satisfaction. This committee was complimented on all sides for its efficiency and affability.

The registration was large — nearly 300 members, delegates, and guests — and the Committee on Credentials was kept busy early and late. The plan of opening the register on Monday evening seemed to meet with favor, enabling the early arrivals to record themselves before the rush of Tuesday morning. Dr. C. W. Hamlin, of Middleville, chairman of this committee, was always at his post, and the exchequer of the Society was largely increased by his watchful care.

The Committee of Arrangements performed its work well, and everything was done to make the labor of the presiding officer easy and pleasant. This means a great deal, for it is within the province of this committee to aid greatly in the administration of the affairs of the Society during the meeting, besides the various other duties that devolve upon it. The genial chairman, Dr. S. B. Ward, was at his best during the banquet, and contributed largely to its éclat.

In a leader, the *Canadian Practitioner*, February 16, 1891, speaks pleasantly of the meeting in several particulars :

It is one of the oldest medical associations on this continent, this being the eighty-fifth annual meeting. Its organization is complete in all respects. Representatives from the various county societies are regularly elected, and generally make it a point to attend the meetings. Certain powers are given to the Society by the State Legislature, cor-

responding to a certain extent with those given to the Ontario Medical Council by our Government.

The Society is showing a commendable desire to raise the standard of medical education in New York, and through its influence an act has been passed by the State Legislature authorizing the establishment of a central examining board. In comparing it with the meetings of the Ontario Medical Association, we noticed that the proceedings were pushed along at almost railroad speed. For instance, the first morning session commenced at 9.15 o'clock, and its programme included the President's inaugural address, appointments of committees, executive business, and eleven papers. It will probably be a surprise to members of Canadian associations, who see practically nothing done on the first mornings, to learn that this programme was completed.

All questions referring to matters not connected with the reading of papers were referred to committees, and much valuable time was saved thereby.

After referring to the banquet, our contemporary concludes as follows :

The after-dinner speeches on this occasion were remarkably good, being, as a rule, bright, witty, and brief. Among those who shone in this particular line were the genial and popular President ; two of the most gifted sons of the sunny south, Dr. McMurtry, of Louisville, Kentucky, and Dr. Davis, of Birmingham, Alabama ; Dr. St. John Roosa, of New York ; Dr. Reed, of Cincinnati ; and representatives of the local clergy.

The members extended to their guests a generous hospitality. The visitors from Canada, Drs. J. F. W. Ross and A. H. Wright, of Toronto, were entertained in royal style by the President and the good people of Albany.

The *Boston Medical and Surgical Journal* devotes generous space to the proceedings of the meeting, its account thereof running through several consecutive numbers.

The *Philadelphia Medical and Surgical Reporter*, in its New York correspondence, publishes a lengthy *résumé* of the proceedings, and other journals out of the State have published some of the papers read at the meeting. Among the latter may be mentioned the *Virginia Medical Monthly*, and the *Medical Mirror*.

Dr. William H. Taylor, of this city, was elected Honorary Member of the New York Medical Society, at its late meeting. We are glad to see honors of this character coming from the East. In this instance it is not only complimentary, but most worthily bestowed.
— *Cincinnati Lancet-Clinic*.

Personal.

DR. L. S. McMURTRY, of Louisville, Ky., who was elected President of the Southern Surgical and Gynecological Association, meeting in Atlanta, November, 1890, is a native of Kentucky and a graduate of Centre College in that State. He graduated in medicine at the University of Louisiana, and afterwards studied at the University of New York. He was Professor of Anatomy in the Kentucky School of Medicine several years, and is now surgeon of the Sts. Mary and Elizabeth Hospital in that city. Two years since, he was President of the Kentucky State Medical Society. Dr. McMurry has made numerous contributions to medical literature, relating mostly to abdominal surgery and the diseases of women. He has been elected a Fellow of the Obstetrical Society of Edinburgh. He is about thirty-eight years of age.—*The Dixie Doctor*.

DR. CHARLES A. L. REED, of Cincinnati, who was elected Chairman of the Section of Obstetrics and Diseases of Women, at the Nashville meeting of the American Medical Association, will preside over his Section at the meeting to be held in Washington, D. C., May 5, 6, 7, and 8, 1891. Dr. Reed is one of the foremost men in his department of the science and art of medicine, and will undoubtedly make his talents as an executive officer felt in the work done by his Section this year. He is desirous that all who wish to read papers relating to Obstetrics, Gynecology, or Abdominal Surgery, may furnish their titles at an early day. His address is 311 Elm street, Cincinnati, O.

Society Notes and Meetings.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION was organized on the 22d of January, 1891, at the Academy of Medicine, No. 17 West 43d street, New York, by the adoption of a constitution and by-laws, and the election of the following officers: President, G. Betton Massey, M. D., Philadelphia; Vice-Presidents, William James Morton, M. D., and Augustin H. Goelet, M. D., New York; Secretary, William H. Walling, M. D., Philadelphia; Treasurer, George H. Rohé, M. D., Baltimore. Executive Council: Horatio R. Bigelow, M. D., Philadelphia; Franklin H. Martin, M. D., Chi-

cago; William F. Hutchinson, M. D., Providence, R. I.; Frederic Peterson, M. D., New York, and Chauncey D. Palmer, M. D., Cincinnati, O.

DOCTOR BENJAMIN LEE, Secretary of the State Board of Health of Pennsylvania, has accepted the position of Secretary of the Section on State Medicine of the American Medical Association. As the meeting takes place in Washington, May 5th, it is important that all papers intended for this Section should be in his hands by the 5th of April. All members of the Association desiring to be enrolled in the Section are requested to forward him their names at 1532 Pine street, Philadelphia.

THE BUFFALO OBSTETRICAL SOCIETY, at its last annual meeting, elected the following officers for the ensuing year: President, Dr. A. H. Briggs; Vice-President, Dr. DeLancey Rochester; Secretary and Treasurer, Dr. William C. Krauss.

THE AMERICAN MEDICAL ASSOCIATION will hold its forty-second annual meeting in Washington, on Tuesday, Wednesday, Thursday, and Friday, May 5, 6, 7, and 8, 1891.

THE meeting of National Association of Railway Surgeons will be held in Buffalo, commencing Tuesday, April 30, 1891, and continuing three days.

Journalistic Notes.

THE *Neurologisches Centralblatt*, published under the direction of Prof. Mendel, of Berlin, begins the new year under most favorable auspices. It is devoted entirely to neurology and psychiatry, and keeps its readers well informed on the advances continually taking place in these important fields. Its last number contains an abstract from the proceedings of the Buffalo Pathological Society.

THE New Year brings *The Microscope*, edited by Dr. Alfred C. Stokes, of Trenton, N. J., greatly improved, to our exchange table. New type and appropriate head pieces and vignettes add much to make it a credit to the typographical art. *The Microscope* is always overflowing with the best of literature in its special line, and its appearance is always looked forward to with genuine pleasure.

A NEW journal, *Anales de la Asistencia Publica*, published at Buenos Ayres, and as its title indicates devoted to Hygiene, has recently made its appearance upon our exchange table. It is a monthly publication, large size, of excellent paper and print, and devoted more to the questions of public health and hygiene. Among its first contributions are the Sanitary Condition of Rio Janeiro and articles on the Treatment of Syphilis; Report on the Influenza in Argentina, Year 1890; Meteorology and Hygiene, etc. The subscription price is one Peso, and is published at Corrientes, 829 Buenos Airas.

THE *Revista De Ciencias Medicas De Barcelona* begins its seventeenth year with a new garb and new form, thus materially increasing its attractiveness. The *Revista* is one of the best of our Spanish exchanges, and is in the front rank of medical journalism. It stands aloof from that class of journals which compel their readers to dissect out the reading matter from a mass of misplaced advertisements.

Book Reviews.

A TEXT-BOOK OF COMPARATIVE PHYSIOLOGY, FOR STUDENTS AND PRACTITIONERS OF COMPARATIVE (VETERINARY) MEDICINE. By WESLEY MILLS, M. A., M. D., D. V. S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal; author of a text-book of Animal Physiology, etc., With 476 illustrations. Small octavo; pp. xx.—636. New York: D. Appleton & Co. 1890.

The author is already widely known through his work on Animal Physiology, and therefore needs no introduction to the medical profession of America. This work is designed as a text-book for students in human and more particularly comparative physiology, and fills a want long existing. The study of comparative anatomy and physiology has been too long neglected in our medical curriculum, perhaps, because no suitable text-book was at command. The larger works of Chanveau, Robert Meade Smith, and the author, dealt too largely with the specialties of comparative anatomy to sanction their use in our short medical courses. Where students have not pursued biological studies in colleges before entering upon their medical course, they should be compelled to attend courses on

zoology and comparative medicine before trying to master the intricacies of human medicine. It seems that the work before us is well adapted for these studies, especially in physiology.

The author has followed the same systematic course in treating his subjects so characteristic of his larger work, and begins with the consideration of the simplest forms of life, the unicellular organisms. The chapters on General Biology, Reproduction, Development of the Embryo, and Evolution, are treated in a fascinating manner, and hold the reader's attention through chapters which are proverbially considered dry and uninteresting.

The chapters on the Blood, Circulation and Digestion, contain the latest researches in these departments, and are profusely illustrated. To the oft-inquired question: Why does not the stomach digest itself during life, the author says: "The secretion of gastric juice runs parallel with the need of it, and is dependent on the introduction of food, its quality, quantity, etc." In other words, if there is nothing to be digested in the stomach, there is no digestion going on owing to lack of a digester. The stories on Respiration, The Nervous System, The Special Senses and Locomotion, are equally well told, and are full of choice sayings and familiar examples, helping to make the text as simple and cogent as possible. The writer also believes that a good illustration is worth two pages of text, for hardly a page that does not contain one or more well-executed engravings.

The publishers have also done their utmost to clothe this work in the best form possible, and have succeeded admirably.

AN ILLUSTRATED ENCYCLOPÆDIC MEDICAL DICTIONARY. Being a dictionary of the technical terms used by writers on medicine and the collateral sciences, in the Latin, English, French and German languages. By FRANK P. FOSTER, M. D., editor of the *New York Medical Journal*, assisted by eleven collaborators. Vol. II. Caspary. With illustrations. Quarto, pp. 792. New York: D. Appleton & Co. 1890.

When the first volume of this comprehensive dictionary appeared, we expressed our approbation of the work (see *JOURNAL*, August, 1888,) in measured and considerate terms. After a careful examination of the present volume, we see no reason to modify our opinion, but rather to intensify the judgment then advanced. The elaborateness of the plan, the precision of its details, and the accuracy of execution at once command our attention and admiration.

In turning its pages with reference to definitions, one is par-

ticularly impressed with the clearness of expression on that point without diffuseness. Here we find thousands of strange words that betray with startling abruptness our ignorance of medical terms, or else delight us with new-found old friends that had been forgotten because of "innocuous desuetude."

One of the strong features of this dictionary is the excellent character of the illustrations, which everywhere betray artistic merit and truthful accuracy. It is a pity that we have to wait so long for the successive volumes to appear, but this could not well be remedied in a work on such a grand scale. Perhaps something may be thought, if not said, in criticism on this score, but we prefer to possess our souls in patience, when such a rich storehouse of knowledge is being opened to us, rather than to carp at the tardiness of the person who holds the key. Dr. Foster and his able staff deserve nothing but praise for the work in which they are engaged, and, when completed, it may well take rank as the foremost literary achievement of the century in the field of medicine. The publishers are also entitled to the highest commendation for their enterprise and the perfection of their work.

A PRACTICAL TREATISE ON HEADACHE, NEURALGIA, SLEEP AND ITS DERANGEMENTS, AND SPINAL IRRITATION. By J. LEONARD CORNING, M. A., M. D., Consultant in Nervous Diseases at St. Francis Hospital; Fellow of the New York Academy of Medicine; Member of the New York Neurological Society, etc. Second edition with an appendix—Eye-Strain, a Cause of Headache. By David Webster, M. D., Professor of Ophthalmology in the New York Polyclinic; Surgeon to the Manhattan Eye and Ear Hospital, etc., etc. In one octavo volume, nearly 300 pages. Price, \$2.75. Uniform in style with Medical Classics. Special rate for the set. New York: E. B. Treat, publisher, 5 Cooper Union. 1890.

The second edition of this popular work is now given to the profession, with some important additions, especially the chapter on Eye-Strain, by Dr. Webster, of New York. The chapters on Headache—some sixty pages,—treat more of idealism in these cases than realism, and leaves the reader after all to make his own diagnosis and treatment. The subject matter is condensed too much to give very positive information, such as one would seek in treatises and monographs on special subjects. The chapters on Neuralgia are more complete and redundant in therapeutical measures. The author's ingenious appliances are carefully and fully described, giving the idea that there is still some room for originality in the discussion of this malady. The chapters on Insomnia and Spinal

Irritation, although we question this right of place in a "Treatise on Headache and Neuralgia," are well written and deserve more prominence than closing chapters in a book of this description.

The chapter on Eye-Strain will be read with much interest, in view of the recent conflict between Dr. Stevens and the New York Neurological Society.

The typographical work is uniform with the other volumes of medical classics, and needs no description to the reader save that it is on the same high level.

W. C. K.

OINTMENTS AND OLEATES, ESPECIALLY IN DISEASES OF THE SKIN. By JOHN V. SHOEMAKER, A. M., M. D., Professor of Materia Medica, Pharmacology, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. Second edition, revised and enlarged. No. 6 in the Physician's and Student's Ready Reference Series. Philadelphia and London: F. A. Davis. 1890. Price, \$1.50 net.

This is one of the most useful of the recent additions to the literature of materia medica and pharmacy. Ointments and oleates must ever play an important part in the treatment of disease, and it is well to have their preparation and mode of application grouped in a convenient form for reference. Dr. Shoemaker has done his work admirably in this little treatise, and it should have a ready sale. The price is reasonable, and the make-up of the book is handsome in every way. This second edition contains additions and revisions that fetches it forward to the latest date. The oleates are given a prominence that they deserve, and full directions are given for their combination with appropriate drugs and remedies. We repeat that this is a work that has been well prepared, and is deserving a place on the book-shelves of every progressive physician.

OPERATION BLANKS. Containing directions for the preparation of: I. The Patient; II. The Room and the Bed; III. Dressings, etc.; IV. Medicines, etc., to which is added a list of Instruments required in various operations. By W. W. KEEN, M. D., Professor of Surgery in the Jefferson Medical College, Philadelphia. Published by Lea Brothers & Co., 706-708 Sansom Street, Philadelphia, Pa.

In the haste incident many times to the preparation for an operation, some of the essentials are liable to be overlooked, and these blanks will serve as a reminder to the busy surgeon. We commend them as a useful part of the nurse's outfit also.

As a surgeon of world-wide repute, and as Professor of Surgery in the Jefferson Medical College, of Philadelphia, Dr. Keen has had great experience in the requirements for operations of every description. The present blanks are elaborated from similar forms used by him for many years, and are a part of his system of preparations as detailed in his paper on The Organization of an Operation, in the *American Journal of Medical Sciences* for January, 1891. They will be found a great convenience by surgeons engaged in every line of operative work. The Operation Blanks are arranged for checking directions to be given to nurses, and for securing from dealers all the drugs and materials which may be necessary. The List of Instruments is classified according to the nature of the operation, and ensures that nothing shall be forgotten. The blanks are bound in blocks containing fifty and carrying a permanent list of instruments. Each block, therefore, answers for fifty operations. The price is fifty cents.

PHYSICAL DIAGNOSIS AND PRACTICAL URINALYSIS. An Epitome of the Physical Signs of the Heart, Lung, Kidney and Spleen in Health and Disease. Edited by JOHN E. CLARK, M. D., Professor of General Chemistry and Physics in the Detroit College of Medicine. 41 illustrations. Cloth, 12mo, 200 pages. Price, postpaid, \$1.00. *Illustrated Medical Journal Co.*, Publishers, Detroit, Mich.

In the arrangement of this work the object has been to present to the medical student and practitioner a systematic and condensed course of Physical Diagnosis and Urinalysis. The portion of Urinalysis will be found to consist of two parts, practical and reference. The editor believes there is a demand, in many medical schools, and by many medical students, for a short, definite course of organic chemistry, touching alone on those subjects of every-day interest to the medical practitioner, such as the analysis of urine, chemical and microscopical; the examination of sputa, bile, blood, bacteria, etc; methods for the quantitative estimation of the more important urinary constituents, normal and abnormal, such as urea, chlorides, sugar, albumen, etc. To meet these requirements the editor has compiled this volume. Teachers in the laboratory will find the work of advantage as giving the plan for definite instruction with such manipulatory details as will enable students to pursue the course of urine analysis with the minimum of assistance. This is essentially the same as the course given by the editor in the college with which he is connected. Plates have been introduced as needed to still further assist in elucidating the text.

TRANSACTIONS OF THE MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND, at its semi-annual session, held at Hagerstown, Md., November, 1889. Ninety-second annual session, held at Baltimore, Md., April, 1890.

The Transactions include papers on the following sections: Surgery; Practice of Medicine; Obstetrics and Gynecology; Materia Medica and Chemistry; Anatomy, Physiology, and Pathology; Psychology and Medical Jurisprudence; Ophthalmology, Otology and Laryngology.

The papers show great care in research. The subjects are well chosen, as the practical points of our science are those discussed. The paper on Review of Hypnotism, by Dr. Preston, is judicious and free from bias. The report of Punctured Fracture of the Cranium is a valuable addition in the literature of cranial surgery.

J. W. P.

MODERN TREATMENT OF HEADACHES. By ALLAN McLANE HAMILTON, M. D. The Physician's Leisure Library. No. 6. second edition. Detroit: George S. Davis. 1890. Price, cloth, 50c.; paper, 25c. Pp. 122.

If a physician peruses this little work during his leisure moments, he will find it not only a pleasure but an important aid in the treatment of this obstinate ailment. It is overflowing with valuable suggestions and practical formulæ drawn from the author's own experience, that consequently carry with them much weight and conviction. The fact that this work has undergone a second edition shows it to be fully appreciated by the profession at large.

W. C. K.

POST-MORTEMS: What to Look For, and How to Make Them. By A. H. NEWTH, London. Edited, with numerous notes and additions, by F. W. OWEN, M. D., formerly Demonstrator of Anatomy, Detroit College of Medicine. Cloth, 12mo; post-paid, \$1.00. The *Illustrated Medical Journal Co.* publishers, Detroit, Mich.

This book is replete with information that every person interested in necroscopy should have at easy command. It has not been designed to take the place of large works upon pathology by its authors, but to present, in a tabulated way, with quick side-head references, all the important conditions of an organ met with post-mortemly, either in health or disease. To the country physician, who makes autopsies infrequently, it is especially valuable; also to the medical student who is occasionally in the "dead-house" of the

hospital. It is the only brief work of the kind now at command. The American editor has made a great many examinations for court uses, and he has added numerous important notes to the text of the English author. Besides the ordinary conditions met with after death, there are chapters devoted to the post-mortem appearances seen in those poisoned, drowned, hanged, or cases of infanticide. It will thus be of great use in these cases of "suspected deaths." Full directions are also given for exposing the organs advantageously for their complete examination. The book will be sent post-paid upon receipt of price by its publishers.

BOOKS AND PAMPHLETS RECEIVED.

A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A. B., A. M., M. D., L. L. D., Late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York; Consulting Surgeon to Hospital for Ruptured and Crippled, to St. Elizabeth's Hospital, etc.; author of a Treatise on Military Surgery and Hygiene; a Treatise on the Principles and Practice of Surgery, etc. Eighth edition, revised and edited by Stephen Smith, A. M., M. D., Professor of Clinical Surgery in the University of the City of New York and Surgeon to Bellevue and St Vincent's Hospitals, New York. Illustrated with 507 wood-cuts. Pp. xvi.—849. Philadelphia: Lea Brothers & Co. 1891. Price, cloth, \$5.50; sheep, \$6.50.

A Compend of Diseases of Children, especially adapted for the use of medical students. By Marcus P. Hatfield, A. M., M. D., Professor of Diseases of Children, Chicago Medical College; Physician to Wesley Hospital, etc. With a colored plate. Quiz Compend No. 14. Philadelphia: P. Blakiston, Son & Company. 1890.

A Guide to the Practical Examination of Urine. For the use of physicians and students. By James Tyson, M. D., Professor of Clinical Medicine in the University of Pennsylvania, and Physician to the Hospital of the University; Fellow of the College of Physicians of Philadelphia, etc., etc. Seventh edition, revised and corrected. With a colored plate and wood engravings. Philadelphia: P. Blakiston, Son & Company, 1891.

Manual of Clinical Diagnosis. By Dr. Otto Seifert, Privatdocent in Würzburg, and Dr. Friedrich Müller, Assistent der II. Med. Klinik in Berlin. Translated from the fifth German edition, enlarged and revised with the permission of the authors. By William Buckingham Canfield, A. M., M. D., (Berlin) Fellow of the American Academy of Medicine, Member of the Medical and Chirurgical Faculty of Maryland; Visiting Physician to the Union Protestant Infirmary of Baltimore; Lecturer on Clinical Medicine, and Chief of Chest Clinic University of

Maryland. Second English edition, revised and enlarged, with fifty illustrations and one colored plate. New York and London: G. P. Putnam's Sons. The Knickerbocker Press. 1890.

Études Sur La Rage et la méthode Pasteur. Par le Dr. Lutaud. Rédacteur en chef du *Journal de Médecine* de Paris. Second edition, pp. 440. 12mo. Paris: *Journal de Médecine*, 35 Boulevard Haussman. 1891.

Principles of Surgery. By N. Senn. M. D., Ph. D., Milwaukee, Wis. Professor Principles of Surgery and Surgical Pathology in the Rush Medical College. Chicago, Ill.: Professor of Surgery in the Chicago Polyclinic; Attending Surgeon to the Milwaukee Hospital, etc. Illustrated with 109 wood engravings. Octavo, pp. xiii. — 611. Philadelphia and London: F. A. Davis. 1890. Price, cloth, \$4.50; sheep, \$5.50 net.

Heredity, Health and Personal Beauty. By John V. Shoemaker. A. M., M. D.: Professor of Materia Medica and Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. Octavo, pp. xv. — 422. Philadelphia and London: F. A. Davis. 1890. Price, cloth, \$2.50; $\frac{1}{2}$ Mor., \$3.50 net.

Transactions of the American Gynecological Society. Vol. XV. For the year 1890. Small octavo, pp. xxxix.—411. Philadelphia: William J. Dornan. 1890.

Transactions of the American Association of Obstetricians and Gynecologists. Vol. III., for the year 1890. Standard 8vo, pp., xliii.—385. Illustrated with nineteen plates, two charts, and forty-six engravings. Philadelphia: William J. Dornan. 1891.

Wood's Medical and Surgical Monographs. Vol. IX., No. 1. January, 1891. Published monthly. New York: William Wood & Company. Price, \$10.00 a year; single copies, \$1.00.

I. Retroversion and Retroflexion of the Gravid Uterus. II. Some Points in the Technique of Laparatomy. III. A Series of Cases of Abdominal Section. (Reprinted from the *Edinburgh Medical Journal*.) By J. Halliday Croom. M. D., F. R. C. P. E., F. R. S. E., Physician and Clinical Lecturer on Diseases of Women, Royal Infirmary, Physician Royal Maternity Hospital, etc.

Laws of the State of Michigan Relating to the Public Health in Force in the Year 1890. Compiled under the direction of the Secretary of the State Board of Health. Lansing: Darius D. Thorp. State Printer and Binder. 1889.

Cornell University College of Agriculture. Bulletin of the Agricultural Experiment Stations, All Divisions, XXV.; December, 1890. Sundry Investigations made during the year. Ithaca: Published by the University. 1890.

Proceedings and Addresses at a Sanitary Convention held at Lapeer, Mich., March 27 and 28, 1890. Supplement to the Report of the Michigan State Board of Health for the year 1890.

Phenacatine-Bayer: Its Action; Recent Results. Wm. H. Schieffelin & Co. New York: 1890.

Annual Report of the Postmaster-General of the United States for the fiscal year ending June 30, 1890. Washington: Government Printing Office. 1890.

Mechanical Obstruction in Diseases of the Uterus. By George F. Hulbert, M. D. St. Louis: Reprint, *The Medical News*, December 20, 1890.

Use and Abuse of the Obstetrical Forceps. By Eugene Prosper Bernardy, M. D., Philadelphia. Reprint, Transactions American Association of Obstetricians and Gynecologists. Vol. III. 1890.

Twenty-Second Annual Report of the New York Physicians' Mutual Aid Association, By-Laws and List of Members. New York: William Wieser, 1891.

Nasal Intubation. By D. H. Goodwillie, M. D. Reprint. *The New York Medical Journal*, May 17, 1890.

HEALTH BULLETINS.

New York State Board of Health for December, 1890.

Tennessee State Board of Health. January 20, 1891.

Abstract of Sanitary Reports U. S. Marine Hospital Service. Vol. VI., Nos. 5. 6. 7. and 8.

Miscellany.

VICK'S FLORAL GUIDE FOR 1891.—No lover of a fine plant or garden can afford to be without a copy. It is an elegant book of over 100 pages, 8½ x 10½ inches, beautiful colored illustrations of sunrise amaranthus, hydrangea and potatoes. Instructions for planting, cultivating, etc. Full list of everything that can be desired in the way of vegetable and flower seeds, plants, bulbs, etc. Also full particulars regarding the cash prizes of \$1,000 and \$200. The novelties have been tested and found worthy of cultivation. We hope it will be our good luck to see the Nellie Lewis carnation and taste the Grand Rapids lettuce. It costs nothing, because the 10 cents you send for it can be deducted from the first order forwarded. We advise our friends to secure a copy of James Vick, Seedsmen, Rochester, N. Y.

RECENT MEDICAL PATENTS. — Liquid-evaporating apparatus (3 patents), J. A. Morrell, Lansdale, Pa. : Evaporating liquids, J. A. Morrell, Lansdale, Pa. : Insecticide, F. Jones, Morse, Kan. : Obstetrical forceps, A. B. Lyman, Baltimore, Md. : Making vegetable pepsine, V. Marcano, Caracas, Venezuela : Making peptonized meat, V. Marcano, Caracas, Venezuela : Making peptones, V. Marcano, Caracas, Venezuela : Concentrating solutions (2 patents), J. A. Morrell, Lansdale, Pa. : Syringe (2 patents), W. Guptill, Boston, Mass. : Artificial tooth, F. T. Van Woert, Brooklyn, N. Y. : Dose-measuring bottle, H. S. Herrick, San Francisco, Cal. : Dental-pluggers, J. L. Mewborn, Memphis, Tenn. : Disinfecting apparatus, F. J. Mitchell, New York, N. Y. : Nursing-bottle holder, J. Von Huppmann-Valbella, New York, N. Y. : Forceps for dental-wedges, G. J. Davison, Richmond, Va. : Surgical bandage winder, W. Giltfillan, Steinway, N. Y. : Vaginal syringe, J. R. Trott, Morrisonville, Ill. : Ammonia-still, F. Kaiser, Knoxville, Tenn. : Capsule-press, F. W. Perry, Philadelphia, Pa. : Liniment, D. Meinen, Warrenton, Tex. : Syringe, E. Bartsch, San Francisco, Cal. : Device for facilitating the taking of pills, J. Yates, London, England.

CHAS. J. GOOCH, *Patent Attorney, Washington, D. C.*

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

OFFICE OF THE SECRETARY.

284 Franklin Street, Buffalo, N. Y.

FEBRUARY 20, 1891.

THE announcement is made to the profession that the *Annual Transactions*, Vol. III., 1890, of this Association is now ready for delivery. It is a handsome book, standard octavo in size, containing over 400 pages, and is profusely illustrated with plates, photo-engravings and wood cuts. The edition is limited, and orders must be placed at once. Price, cloth, \$5 ; half Russia, \$6.

WILLIAM WARREN POTTER, M. D., *Secretary.*

FOR SALE.

WE HAVE FOR SALE a small, well-stocked practice worth \$3,500 to \$4,000 per year, in a pleasant, healthy, and profitable village in Western New York. Railroads, water, and other facilities. For further particulars, inquire of the Editor of this Journal, or the undersigned.

NOTICE TO CONTRIBUTORS. — We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the *JOURNAL* should be handed in before the first day of the month. The Editors are not responsible for the views of contributors or contributors. All communications should be addressed to

284 FRANKLIN STREET, BUFFALO, N. Y.

CHLORALAMID.

(SCHERING.)

HYPNOTIC.—Much depends upon the proper administration of the new hypnotic, Chloralamid, to obtain the full effect and satisfactory and beneficial results. The dose is from fifteen to sixty grains, with an average dose of thirty grains. Chloralamid is soluble in about twenty parts of cold water, and in $1\frac{1}{2}$ parts of alcohol.

Never dissolve or dispense Chloralamid in hot water or warm solutions, as the heated preparation decomposes.

The best modes of administration are :

1. In a teaspoonful of whisky or brandy ;
2. In properly proportioned solutions with wine, spirits, or spirituous compounds ;
3. In a small cup of cold water or cold tea ;
4. In powder form, in wafers or cachets, washed down with cold water.

CHARACTER OF COMMENDATIONS.

THE subject of uterine disease reminds me that during the past six months I have had my attention drawn to a remedy which goes under the name of *Dioivburnia*, the formula of which is given by the proprietors, it being composed of equal parts of the fluid extracts of *viburnum prunifolium*, *viburnum opulus*, *dioscorea villosa*, *aletris farinosa*, *heionias dioica*, *mitschella repens*, *carthophyllum thalictroides*, *scutellaria lateriflora*, each fluid ounce contains $\frac{1}{2}$ dram each of the fluid extracts.

The proper dose is for adults from a dessert to a table-spoonful three times daily after meals.

In urgent cases with much pain it should be given every hour.

CLINICAL REPORTS ON ANTIKAMNIA

Montrose, Iowa, Dec. 20, 1890.

ANTI-KAMNIA Chemical Co., St. Louis, Mo.

Gentlemen: I procured some of your Anti-Kamnia and have used it in several cases of "*La Grippe*," with the most happy results, both to myself and patients. It fills a place where the preparations of opium would do positive harm. Progressive physicians will all feel thankful for the remedy.

Respectfully, JOHN J. RICE, M. D.

O'FALLON, Mo., Jan. 5, 1891.

ANTIKAMNIA CHEMICAL Co., St. Louis, Mo.

Gentlemen—The Antikamnia came to hand all right. I use it to control the terrible pains of "La Grippe," and it does even more than I could expect. I gave it in five grain doses; rendering my patients perfectly quiet and easy, and procuring them a good night's rest.

Respectfully, HY. LINDSAY, M. D.

BROMIDIA is used more to-day than ever. It is reliable and never fails in its action.—*Canada Lancet, January, 1891.*

WON BY AMERICANS.

THE LEADING PRIZES COME TO THE UNITED STATES.—In *The Queen's* last word contest, Dr. Edmund T. Stevens, of Buffalo, N. Y., won the first prize of a free trip to Europe and \$200 in cash, and Annie B. Turner, of Deposit, N. Y., secured the special prize of a handsome Shetland pony.

The publishers of this well-known magazine have decided to offer one more competition, and to the person sending them the largest list of English words (of not less than four letters) constructed from letters contained in the three words, "Dominion of Canada," they offer many useful prizes, including \$750 in cash, Shetland ponies, china dinner sets, gold watches, French music boxes, Portiere curtains, silk dresses, mantle clocks, etc., all to be awarded strictly in order of merit. An elegant silver tea service, (valued \$30) will be given *each* day to the persons from whom the largest list is received that day from the State in which they reside. The object of this Special Daily Prize for *each* State is to increase the interest in *The Queen's* competitions in *every* locality in the United States. Those desiring to contest for one of these valuable prizes may start on their list at once, but send six U. S. 2c. stamps, and receive last number of *The Queen* with full particulars before forwarding your list. Address *The Canadian Queen*, Toronto, Canada.

Down in Kentucky, to avoid being buried alive, it is said that a friend approaches the corpse, and in a low whisper into the ear of the corpse, the friend says: "Let's take a drink." If there is no response, the funeral proceeds.



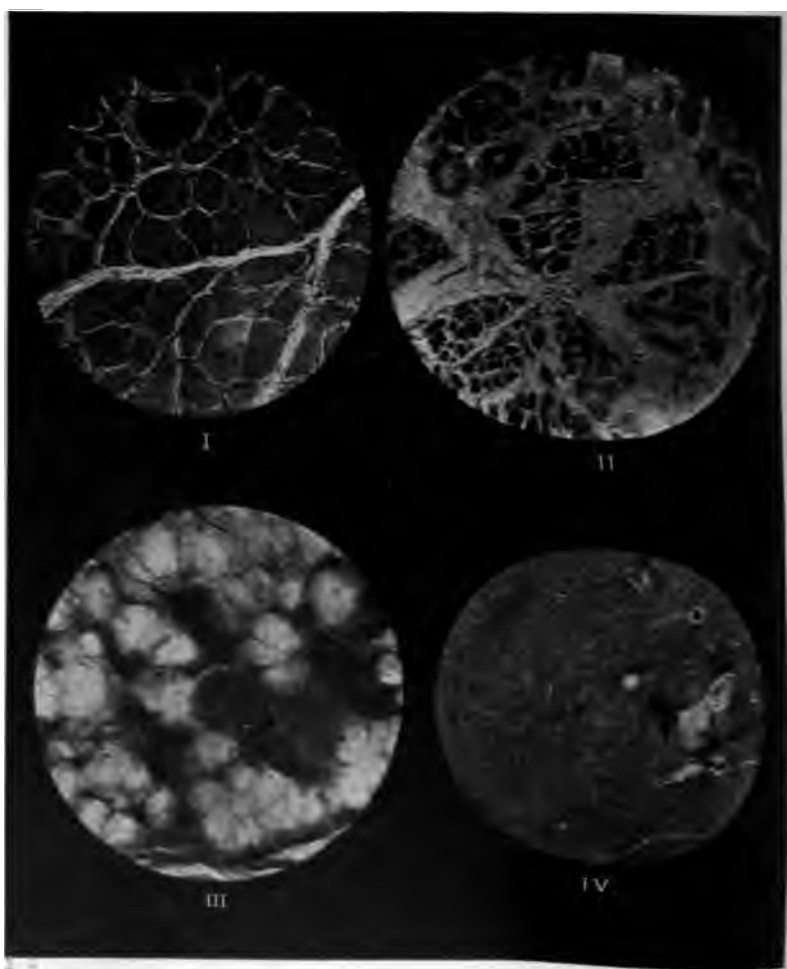


ILLUSTRATION OF MUSCULAR ATROPHIES—KRAUSS.

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Original Communications.

MUSCULAR ATROPHIES: A CLINICO-PATHOLOGICAL STUDY.¹

By WILLIAM C. KRAUSS, M. D.,

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ATROPHY is a retrogressive change taking place in parts originally well formed and well grown. Muscular atrophy is a retrogressive change taking place in the muscular fiber, causing a diminution in its bulk and substance, thereby rendering it incapable of performing its normal physiological function. Muscular atrophy must not be confounded with hypoplasias or aplasias, but only when occurring in muscles once able to perform work measured by their development and vitality. On the other hand, we must keep distinct and separate a retrogressive movement occurring when the active cell growth is no longer predominant, but has been succeeded by a period of involution or cell decay; this we designate as senile wasting, or physiological retrogression or active atrophy.

Another class of atrophies, which are more physiological than pathological, are the passive atrophies. These are occasioned by diminished nutrition, general anemia, defective assimilation, febrile processes, starvation, etc. Local atrophies, due to mechanical hindrances, injury to the tissue or through some interference with the circulation, are also examples of passive atrophies.

Analogous retrogressive processes may occur prematurely under pathological conditions, and to these I wish to call your attention this evening.

In 1848, Duchenne (*de Boulogne, France*), presented a memoir to the Institute on the Symptomatology, Differential-diagnosis and Pathogenesis of progressive muscular atrophy. Aran, a co-worker

¹ Read before the Buffalo Medical Club, Nov. 6, 1890. Published by request.

of his, at the Hôpital de la Charité, Paris, appropriated to himself, in great measure, the deductions and facts collected by Duchenne, and published the first paper on this subject in 1850. Prior to this time, Sir Charles Bell made some observations on chronic muscular atrophy and was able to differentiate it from primary paralysis. The observations of Duchenne and Aran gave a new impetus to the study of this affection, and since that time important discoveries and researches have been instituted, among others, by Cruveilhier, Charcot, Luys, Landouzy, Dejerine and the school of the Salpêtrière in France; Griesenger, Cohnheim, Leyden, Liebreich and Erb in Germany; Lockhart-Clarke, Gowers and Tooth in England; Hammond, Sachs and others in America.

At the present time, although the study of this affection is well formulated, and the views held by different observers have become more or less harmonized, yet the resemblances between the different forms cause some difficulty in rendering a proper diagnosis and a consequent prognosis.

Histology.—A striated muscle is composed of a number of bundles, surrounded by a layer of areolar tissue, the external perimysium. Each bundle or fasciculus, enveloped by a thin delicate membrane, the internal perimysium, is composed of bundles of fibers, separated from each other by a delicate connective tissue, the endomysium. These fibers are arranged parallel to each other, are from an inch to one and a half inches in length, and are united either to the tendons or aponeuroses, or else connected with the adjacent fiber.

Each fiber is composed of a number of filaments or fibrillæ, inclosed in a transparent homogeneous membrane, designated by Bowman the sarcolemma. In the mammalia, elongated nuclei are present on the internal surface of this membrane. The primitive fibers are cylindrical or prismatic in form, about one-four-hundredth of an inch in breadth, and their length depends not so much the length of the muscle as upon the arrangement of the tendons. They are marked by transverse and longitudinal lines or striae, giving them a characteristic, striated or striped appearance. I will not take up the history of the primitive fibrillæ, but will limit myself to the account of them. (See Plate, Fig. I.)

Each fiber has a vascular and nervous supply, the former being furnished by the ramifications of the capillaries, running parallel between the fibers. The nervous supply is from the motor nerves, and the question as to whether the motor supply has been the subject of much controversy. The motorial end plates of Kühne or nerve hillocks

of Doyère are generally recognized by most recent observers. The nerve terminates below the sarcolemma, where the medullary sheath becomes blended with it, forming a plate or plaque which is raised somewhat from the fibers, but never encircles it. The axis cylinder is distributed to this plaque, but does not penetrate the interior of the fiber. The origin of the efferent or sensory nerve fibers in the muscle is still a matter of uncertainty.

Degenerative changes must, therefore, be produced by a lesion to the efferent nerves or nerve centers higher up, by some nutritive disturbance, or else through primary disintegration of the protoplasm of the muscle itself.

The two pathological conditions of the muscle which I wish to consider are, simple degenerative atrophy and fatty infiltration, — Lipomatosis.

Pathology.—The most common form is the simple degenerative atrophy, as typified in progressive muscular atrophy. To the naked eye there is little to be seen save the diminution in size, and the pale, pinkish hue of the fibers; to the touch, a soft, spongy feel, with occasional cord-like prominences, instead of a firm resistant mass. The entire muscle, if carefully removed, will be found shorter than normal owing to the contraction of the interstitial connective tissue. Under the microscope the condition is as follows: If the atrophy is not too far advanced, the fibers retain their normal appearance—transverse and longitudinal striation,—but are somewhat narrower. As the process advances, the fibers split up into longitudinal fibrillæ, or transversely into discoid masses and then gradually disappear. In other cases fatty and vitreous degeneration may occur, and the fiber then has the appearance of a sheath containing a clear material with some fat globules. The intensity of this process is not the same throughout the muscle, patches of healthy fibers may be found surrounded by others in different stages of atrophy. Proliferative changes occur in the nuclei of the muscular fibers, and may lead to a new cell growth within the sarcolemma, replacing the contractile substance. Proliferation of the interstitial tissue also occurs and to such an extent as to separate the neighboring fibers. The entire muscle may, in fact, be converted into bands of connective tissue with some fat globules interposed between the separate layers. (See Plate, Fig. II.)

Fatty infiltration and degeneration of the muscular fiber is met with less frequently. Here hypoplasia of the interstitial connective tissue and fatty infiltration follow closely upon the wasting of

the muscle, and cause either no apparent change or else a slight increase in its volume. The muscle appears pale, yellowish, has a greasy feel, and resembles closely, not only macroscopically but also microscopically, a lipoma, or, better, a myo-lipoma. Under the microscope, the large, round, yellowish cells, with dark borders, make up the greater portion of the tissue. Here and there a muscular fiber, with its transverse and longitudinal striation still intact, may be observed. (See Plate, Fig. III.)

The interstitial connective tissue is much increased in volume with proliferation of its nuclei. The substitution of fat may be so pronounced as to give the muscle an hypertrophied appearance, and hence the denomination pseudo-hypertrophy, given this affection by Duchenne in 1861. In some forms of dystrophia, the muscular fiber may be even increased in volume, giving rise to real hypertrophy, a condition sometimes met with in idiopathic muscular atrophy.

Another pathological condition, sometimes found in muscles, especially after infective processes as typhoid, diphtheria, variola, etc., is hyaline or waxy degeneration.

With the exception of the primitive or idiopathic group of muscular atrophies, or those in which the lesion is probably due to some metamorphosis in the protoplasm itself, the pathology is no longer debatable. In this group the muscular changes are not dependent upon any neuropathic lesion, as nerve, cord and brain, after repeated examinations have been found intact.

The Symptoms may be classified as subjective and objective. Subjective: The advent of muscular atrophy in many cases, and especially in those of so-called rheumatic origin, is ushered in by some localized, deep-seated, aching pain, to which little attention is paid. In others, some slight sensory disturbance, as a feeling of numbness, heaviness or sharp lancinating pains as in neuritis may precede the atrophy, while in many no warning whatever is given of the enfeeblement which is soon to occur. Generally the first thing that attracts the patient's attention is the inability to execute certain movements, which, but a short time ago, he was able to carry out with ease and dexterity. If he be an artisan and the atrophy begins in the muscles of the hand, as it so often does, the weakness will soon incapacitate him for his work; if a laborer and the atrophy first affects the shoulder muscles, or muscles of the back, or if a pedestrian and the peroneal muscles succumb early, he is soon made cognizant of some loss of power, which to him

remains for some time unaccountable. Sometimes this weakness is ascribed to overwork, exhaustion, or fatigue, and the usual remedy—rest—fails to restore to the former condition. I have met patients in clinics, especially females, in whom atrophy of the muscles of the hand and arm had existed for years, and attention first called to it by the physician while examining for some other ailment.

In advanced cases the patient is very susceptible to changes of temperature, particularly from warm to cold, and in Winter the atrophied members must be heavily padded to insure his comfort.

In those cases where rheumatic pains have preceded the atrophy, there is, later on, some loss of sensation, but in the great majority of cases the general sensibility is unimpaired.

The objective symptoms offer the physician an important and interesting field for study and observation. His attention, as was that of his patient, is directed at once to the wasting or atrophy of the different muscles. The natural effect of this is to rob those portions of the body of their normal contour and beauty, and bring into prominence the underlying hard bony structures. This wasting may be limited to a single muscle, to a group or system of muscles, may be unilateral or bilateral, general or localized, according to the cause and seat of the primary lesion. In estimating the extent of the atrophy, some more definite means are necessary than merely the sight or touch—and the tape measure is called into service.

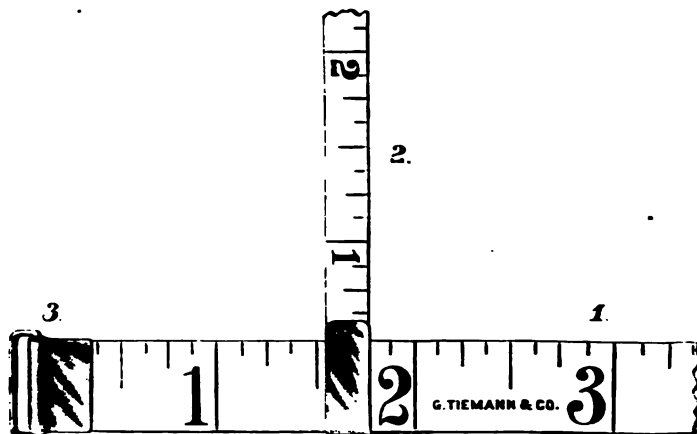
A tape measure (p. 518) which seems to answer every purpose and which has been cordially received by many neurologists, was described by me in the April (1890) number of this journal.¹

It consists of a tape (1) thirty-six inches long and one-half inch wide. The English scale is graduated on one side and the metric scale on the other. The head is supplied with a swivel (3), through which passes the free end of the tape, permitting of uniform tension, greater accuracy in reading, and of its being held with one hand.

The second tape (2) is eighteen inches long and one-quarter inch wide, and is provided with a sliding head, through which the first tape passes. This tape is, therefore, at right-angles to, and movable upon, the first tape. It is also graduated after the English and metric scales. The object of this tape is to ascertain at what distance from a certain fixed bony point the first tape has been

1. See also the *Journal of Nervous and Mental Diseases*, 1890; p. 128.

applied, so that on succeeding occasions the measurement may be taken at the same point. To illustrate: If the tape (1) be applied to the arm at a distance of five inches from the internal condyle of the humerus (reckoned by means of tape 2), it is obvious that on succeeding occasions, or in comparison of the two extremities, the tape (1) must be applied at exactly the same point, thus excluding all possible chance of error.



The atrophy of muscular fibers and the hyperplasia of the connective tissue lead to contraction of the latter, and permanent contractions and distortions of the body and extremities result: the same is produced if a system of muscles is affected and the opponents, remaining intact, predominate. The peculiar shape of the hand in the Duchenne-Aran type, sometimes called *main de griffe*, the turkey gait in the myopathic forms, etc., are examples of this kind.

The integument of the atrophied members has a shrivelled purplish appearance, and the finger nails lose their pinkish tint. Other trophic disturbances, except in atrophies due to a neuritis, are wanting.

In many cases a fibrillary contraction, wave-like in appearance, propagated in the direction of the fibers may be observed occurring either spontaneously or by gently tapping the muscle. This fibrillation, as it is termed, is of short duration, returns after an interval of a few seconds, may be limited to a muscle, or part of a muscle, or may extend over the whole of the affected part or member. It is not pathognomonic of progressive muscular atrophy, as was

formerly supposed, but has been observed in other affections of the muscular system, and even in the healthy muscle.

Loss of Myotatic Irritability : Tapping a healthy muscle produces a slight contraction of the fibers, which calls forth the performance of its function. In the diseased muscle the reflex arc is broken, the centripetal-sensory path remaining undisturbed, while the centrifugal-motor path is broken. The loss of tendon reflexes, in some forms, occurs quite early, even before any serious damage has taken place in the muscular fibers. The patellar and elbow reflexes are the ones most generally examined.

Electrical Irritability : To Duchenne (*de Boulogne*) must be given the credit of having first employed electricity as a diagnostic and therapeutic agent. His method of localizing the electrical current, published in 1850, has served as the foundation for all later electrical researches in medicine. The elder Remak appeared against him, disputing some of his conclusions, particularly as to whether the contraction of the muscle was produced by irritating the bulk of the muscle, or the entrance of the motor nerve into the muscle. Von Ziemssen, taking advantage of this breach, made experiments upon dying patients, and, by careful dissection afterward, discovered that the motor points were those points where the motor nerve approached nearest the surface. 1857. The natural law of muscular contraction under the influence of the galvanic or faradic current, shows the superiority of the cathode pole over the anode, the contractions being short, sharp, and quick. The wasted muscle presents changes of electrical irritability dependent upon the degree and extent of the degeneration. Erb and V. Ziemssen conducted a series of experiments upon diseased muscles, and arrived at practically the same conclusions at exactly the same time—1868.

Their law, called the *Entartungs Reaction*, reaction of degeneration, is as follows : First degree, or partial reaction ; faradic and galvanic nerve irritability preserved, but weakened ; faradic and galvanic muscle irritability preserved, but the contractions, instead of being short, sharp and quick, are slow and vermiform. In the second degree, or complete degenerative reaction, the galvanic and faradic nerve irritability and faradic muscle irritability are lost, but the galvanic muscle irritability is increased. The action of the poles is, however, reversed, the anode closure contraction being greater than the cathode closure, and thirdly, the contractions are slow and vermiform. In the third degree, or severe type, there is entire loss of galvanic and faradic nerve and muscle irritability.

In progressive muscular atrophies, any one of these three degrees may be present, according to the seat and character of the primary lesion. Of these symptoms, the wasting and weakness are the only ones which are truly pathognomonic. The others, which are characteristic, are present in some forms of muscular atrophy, and absent in others.

There still exists some difference of opinion regarding the different forms, and each writer has a classification patterned after his own ideas. In fact, neurology is abreast with the other specialties. No one can claim to be an ophthalmologist without having invented an ophthalmoscope ; no one can lay claim to be an obstetrician without having invented an obstetrical forceps ; and in neurology, a classification of the muscular atrophies is the criterion. Far from drawing any inferences, nevertheless I have made a classification, which is nothing more than a compilation after the different authorities, based upon anatomico-pathological investigations.

CLASSIFICATION.

MUSCULAR ATROPHY.	Physiologi- cal.	Active.	{ Senile Wasting. Diminished Nutrition. Defective Assimilation. Febrile Processes. Direct Traumatism, etc.	
		Passive.	{ Anchyloses. Surgical Appliances. Hysterical Contractures, etc. Spontanic, Secondary, Traumatic, etc.	
		Function- Lesio.	{ Toxic. Infective Processes. Arthritic.	
		Neuropathic.	{ Scapulo-Humeral. (Erb's Juvenile Form.) a. Facio-Scapulo-Humeral. (Landouzy-Dejerine.) b. Peroneal. (Leyden's Hereditary Form.)	
	Pathologi- cal.	Myopathic.	{ Paralysis Pseudo-Hypertrophic. Acute. { Poliomyelitis acuta Infantilis. Poliomyelitis acuta Adultorum	
		Myelopathic.	Protopathic.	{ Hand Type. (Duchenne-Aran.) Peroneal Type. (Charcot-Tooth.) Amyotrophic Lateral Sclerosis. Syringomyelia Gliomatous Growths. Locomotor Ataxia. Multiple Sclerosis. Diffuse Myelitis. Myelo-Myelitis. etc.
		Cerebropathic.	Chronic.	Deutero- pathic.

vice versa, decline. Hence, when functional activity in the cells is diminished or absent, that organ begins to waste or atrophy. Under this head we meet atrophies due to anchyloses, surgical appliances, hysterical contractions, etc.

There is no specific lesion, the atrophy being produced by the inaction of the muscles through some impediment to their normal activity. We have all met examples of this kind ; the atrophy is always local, non-inflammatory, and on resumption of motion the atrophy disappears.

The largest and most important class of atrophies is the tropho-neurotic, or those dependent upon some lesion of either nerve, muscle, cord, or brain, and designated as neuropathic, myopathic, myelopathic and cerebropathic, respectively.

1. *Neuropathic*, are those atrophies dependent upon an inflammatory or degenerative condition of the peripheral nerves. If the atrophy follows a neuritis, as in acute simple neuritis, multiple neuritis, endemic neuritis, hemiatrophia-facialis, or a neuritis consequent to trauma, pressure, chemical irritation, or secondary to some inflammation of a neighboring organ, it is always accompanied by the general symptoms characteristic of nerve inflammation. (Trophic disturbances.) The atrophy is in most cases, of a severe type, local and shows marked electrical changes.

2. *Toxic Atrophies*.—Agents which have been instrumental in setting up a neuritic process and consequently wasting of the muscles are—alcohol, lead, arsenic, mercury, and bisulphide of carbon. The atrophy is generally limited to the extensor muscles, as seen in alcoholic paralysis, lead palsy, arsenical pseudo-tabes, and on eliminating the poison from the system, the atrophy sometimes disappears.

3. *After Infective Processes*.—Following upon an acute attack of diphtheria, variola, typhoid, typhus, cerebro-spinal meningitis, etc., atrophic changes may take place in some of the muscles of the body. The lesion is generally neuritic, the atrophy either the simple or hyaline degenerative, the latter especially in typhoid, variola and cerebrospinal meningitis. In typhoid fever, typical hyaline degeneration of the rectus abdominis, and adductors of the thigh may frequently be met with.

4. *Arthritic Atrophies*.—Following injury to joints, atrophy of the muscles moving that joint, but more especially the extensors, is often observed. If the hip joint is the seat of injury, there is atrophy of the glutei ; if the knee, the rectus femoris ; if the ankle,

the gastrocnemius and soleus. The wasting is often quite pronounced and persistent, with little if any change in the electrical irritability and increased tendon reflexes. The seat of the lesion is purely hypothetical. Vulpian, Charcot and others believe that the articular centripetal nerves convey the irritation to the gray matter and particularly to the motor cells of the anterior horns, thence conveyed to the muscles of the joint through the efferent nerves.

The primary lesion in these neuropathic forms is to be sought for in the nerves supplying the affected muscles. The neuritis may be either interstitial, parenchymatous, or degenerative. In the interstitial form the medullary sheath is broken into fine granules of fat and débris and absorbed. The axis cylinder is swollen, degenerated, and may likewise be absorbed. The nuclei of the sheath of Schwann become swollen and proliferate, leading to the formation of new connective tissue, which, after the period of regeneration, constitutes the bulk of the nerve fiber. The perineurium and endoneurium also take part in this process and become converted into thick layers of connective tissue.

Myopathic Form : Sometimes called primitive or idiopathic, embraces a large class of atrophies which occur mainly in the young, are relatively rare, and as yet offer no clew as to the location of the primary lesion. Careful examination of the nerves and cord have in all cases proven negative, and it is the accepted opinion that the lesion is purely muscular—a myositis—and in some cases a fatty infiltration or lipomatosis.

Wide differences of opinion exist as to the proper classification of this type of atrophy. Although having a limited experience, nevertheless, the classification here appended seems to be the most plausible and capable of modification, should new facts and data be presented. Erb's juvenile form is taken as the type of this class. It is sometimes designated as the scapulo-humeral type, and begins in early youth and childhood. It is a progressive wasting and weakness of the muscles of the shoulder girdle, the upper arm and the back. The forearm, thigh and leg muscles remain intact for a long time. There may be present true or pseudo-hypertrophy of some muscles, as the deltoid, supra- and infraspinati. Fibrillar contractions and reaction of degeneration are never present. The reflexes are unimpaired.

Analogous to this type is the facio-scapulo-humeral type, first described by Duchenne as the *forme héréditaire*; but later more fully and minutely by Landouzy and Dejerine, in 1885. The

wasting of some of the muscles of the face and hypertrophy of the lips give a peculiar tapir-mouth appearance to the patient, "*facies myopathique*." With this exception, this type of atrophy corresponds exactly with Erb's form, and is regarded by many as one and the same. Pathologically, the two show marked resemblances, there being atrophy and disappearance of some of the primitive bundles, with some hypertrophic fibers, and a slight increase of connective tissue and fat.

It has been questioned whether Leyden's hereditary form, first described in 1850, can stand as a clinical entity, or whether it must be classified under Erb's juvenile form. It appears in the majority of cases in males between the eighth and tenth year, and is decidedly hereditary in nature. It begins invariably with wasting and weakness of the muscles of the back and lower extremities. There are no sensory disturbances, no fibrillar contractions; electrical reaction is normal, patellar reflexes are present.

Another form is the pseudo-hypertrophic paralysis of Duchenne. Although hinted at years before by Bell, Meryon, Oppenheimer and Partridge, it remained for Duchenne, in 1861, to interpret correctly its clinical importance and establish it firmly in our nosology. It is no doubt hereditary, and occurs more frequently in boys than in girls. The important symptoms are weakness in the muscles of the leg and back, a waddling gait, an apparent increase in the size of the muscles of the calf, and sometimes thigh and calf. Furthermore, there is lumbar lordosis brought about by wasting of the muscles of the back and extensors of the thigh, some contractures, and a peculiar difficulty in rising from the ground. Repeated examinations of the nerves and cord have been unsuccessful, and hence the inference that the muscle itself is the seat of the lesion.

Myelopathic Atrophies, or Atrophies dependent upon Lesions in the Spinal Cord.—They may be acute or chronic. The acute forms are poliomyelitis infantilis (infantile paralysis) and poliomyelitis acuta adultorum. These two forms come more properly under the head of acute inflammatory processes of the cord, and belong only secondarily to our list of muscular atrophies. The chronic forms comprise most of the chronic affections of the cord. They are divided by Charcot, according to the seat of the lesion, into *protopathic*, where the insult resides solely and alone in the gray matter; and *deuteropathic*, where the gray matter is only secondarily affected. Under the first head we have the Duchenne-Aran, or hand type, characterized by wasting of the small muscles of the

hand, the interossei, superficial and deep muscles of the thenar and hypothenar flexors and extensors of the forearm, biceps, deltoid muscles of the back, shoulders and trunk. This type of atrophy is the original form of progressive muscular atrophy described by Duchenne and Aran in 1848 and 1850.

In 1886 there appeared simultaneously from Charcot and Marie in France, and Tooth in England, the description of another form of atrophy. Its mode of onset is by attacking the muscles of the lower extremities, the extensors of the toes, the small muscles of the foot, then the peronei, the calf muscles and later on the muscles of the thigh. The muscles of the hand and forearm may become involved after a lapse of years. In both of these forms fibrillar contractions, complete and partial reaction of degeneration, and absence of patellar and other reflexes are generally noted.

The pathology of these forms has been the subject of long and earnest controversy. The peripheral or myopathic origin was stubbornly held by Friedreich and the German school, while Cruveilhier, Charcot, Lockhart Clarke and others clung to the central or spinal origin theory. The latter is now the one universally accepted.

The anterior cornua of gray matter present the results of a subacute inflammatory process leading to complete or partial destruction of the ganglion cells, sclerotic changes in the neuroglia, blood-vessel changes, cell proliferation, etc. The contraction of the newly formed connective tissue may even lead to the formation of cavities in the gray matter. (See Plate, Fig. IV.) The anterior spinal roots are affected secondarily, likewise some of the efferent nerve fibers. Charcot's theory, then, is as follows: Atrophy of the muscular fibers is the direct result of irritation, which, beginning in the ganglion cells of the anterior horns, is propagated through the anterior spinal roots and efferent nerves to the muscular fiber. Friedreich's theory was that the primary insult was a myositis with secondary changes as ascending neuritis of the peripheral nerve trunks, which terminated in a chronic myelitis.

The deuteropathic form comprises those affections in which the involvement of the gray matter of the cord is secondary. The atrophy following may be quite pronounced as in amyotrophic lateral sclerosis, syringomyelia, bulbar paralysis, glioma and other neoplasms of the cord. A careful examination is necessary at times to distinguish between the atrophy of these affections and progressive muscular atrophy. In locomotor ataxia, multiple sclerosis,

diffuse myelitis and myelo-myelitis, the atrophy is less pronounced, inconstant and variable in its seat and intensity.

Lastly : *Cerebropathic Atrophies*.— Generally observed in the spastic paralyses of children and adults. The atrophy is limited to the paralyzed members, as in hemiplegia, paraplegia and diplegia. This class of atrophies comes more properly under the head of paralysis and calls for only passing notice.

EXPLANATION OF PLATE.

FIG. I. Cross-section of a normal muscle. Zeiss' E objective, No. 1 eyepiece.

FIG. II. Simple degenerative atrophy of a muscular fiber. Zeiss •E, No. 1 eyepiece.

FIG. III. Fatty infiltration and degeneration of a muscular fiber. Zeiss E, No. 1 eyepiece.

FIG. IV. Destruction of the antero-lateral group of ganglion cells, anterior coruna gray matter, spinal cord. The ganglion cells to the left (antero-median) are intact, while the antero-lateral have been replaced by cicatricial tissue. Zeiss E, No. 1.

The illustrations are reproductions of micro-photographs taken from specimens exhibited before the club.

A SECOND NOTE ON CROUPOUS RHINITIS.¹

By FRANK HAMILTON POTTER, M. D., Buffalo, N. Y.,

Lecturer on Diseases of the Nose and Throat in the Medical Department of Niagara University; Surgeon in charge of the Nose and Throat Department, Erie County Eye, Ear and Throat Infirmary.

Two years ago, before this Society, the writer read a paper with the title of Membranous Rhinitis.² At that time there was but little literature upon the subject, and he had not, therefore, the benefit of the experiences of others to enable him to test the conclusions there presented. Since then the disease has been described by many writers and has received a permanent place in our literature. It begins to appear in the text-books. Bosworth, for instance, in the last edition of his work on Diseases of the Nose and Throat, has a chapter with the title of Croupous Rhinitis." But by far the most exhaustive consideration of this

1. Read before the Medical Society of the State of New York, February 4, 1891.

2. Transactions of the Medical Society of the State of New York, 1890.

subject appears in a paper by Dr. V. Raulin,¹ of Bordeaux. From this paper we learn that the first notice of the disease we are considering appeared in 1882 in an article by Schüller.²

It thus appears, that as far as any record goes, the disease is of recent origin. It is probable, however, that it existed before Schüller described it, but without attracting attention. It deserves further study, and all cases observed should be recorded. The object in recurring to the subject at this time is to relate a single case which exhibited unusual complications, and to offer one or two suggestions which a larger observation has made pertinent.

In the first place, in regard to the name: Croupous Rhinitis seems from all points of view the better term, and moreover is the one employed by the majority of writers. The name used by the author in his first paper, while it indicates something of the nature of the disease, does not describe it as accurately as the word "Croupous." Next, as to the frequency of the disease: In the former article it is stated that this disease occurs in "about two per cent. of all cases of acute rhinitis." Increased experience convinces me that the proportion there stated is too great. Indeed, all those who have written on the subject and have noticed the author's contribution at all, have criticised this proportion of cases of croupous rhinitis to other cases of acute rhinitis as far out of the way. They are quite correct. Although that statement was in accordance with my experience at that time, the last two years convinces me that the statement that croupous rhinitis is a very rare disease would be nearer the truth. In this time I have seen but one case, which reduces the percentage very considerably. This case exhibited some unusual symptoms, and is, therefore, recorded in full. A man, 67 years of age, was referred to me by Dr. James W. Putnam, of Buffalo, on account of an acute rhinitis. He was a strong, healthy man, attended to business every day, and gave a personal history remarkably free from disease; the only thing bearing on his present attack being the statement that occasionally in the Fall of the year he had a "cold in the head," which was characterized by persistent watery discharge. He thought it was a kind of hay fever. It, however, did not appear regularly and it seemed to the writer that it was not sufficient to place him among the hay fever subjects. Upon examination he appeared to be suffering from an ordinary attack of acute rhinitis. I may state here that the nose was symmetrical and remarkably

1. *Revue de Laryngologie, D'Otologie, etc.*, May 1890, p. 289.

2. *Jahrbuch für Kinderheilkunde*, Jahr IV., p. 334.



Front View.



Back View.

EDEMATOUS ACARDIA — ROSS.

free from any deformity. There were no obstructions, either anteriorly or posteriorly. The nostrils, though, were not capacious, and from examination after the attack could be properly described as "narrow." Upon the second day afterward the croupous character of the disease became apparent. For a few days it ran the usual course and then appeared the complication unknown to me in connection with the disease. This consisted of edema first of the upper lip, then of the lower lip and upper part of the throat, and finally of the tongue. The latter swelled enormously and suddenly, and for a time we feared a serious result. Dr. Putnam, who lived directly opposite, was hurriedly called one night when this occurred and I believe his prompt action saved the case. Dreading that the edema would appear next in the epiglottis or in the laryngeal tissues, we prepared ourselves for that emergency, but fortunately this did not occur. Cathartics and diuretics were used freely and the patient was relieved, in this way, of large quantities of fluid. The amount of urine especially was very large, though I regret the daily quantity was not measured. The examination of the urine was negative so far as any disease of the kidneys was concerned. The patient was under observation twenty-five days and was then discharged fully recovered. We learn from this case that croupous rhinitis is not without its dangers, and that, therefore, every case ought to be carefully watched. Nothing has been said about the local treatment, because that was thoroughly considered in the former paper. The general plan is to relieve the stenosis and keep the nasal passages free from the membrane. The various measures that have been suggested may or may not be of benefit to a given case. The local treatment gives some relief, though it may be doubted whether, as yet, it has lessened the duration of the disease. It is to be hoped that continued observations will devise some method that will be more successful than any that, so far, has been suggested.

273 FRANKLIN STREET.

DESCRIPTION OF PHOTOGRAPHIC PLATES OF AN EDEMATOUS ACARDIA.

By JAMES F. W. ROSS, M. D., Toronto, Can.

I WAS sent for, three months ago, to perform a Porro operation upon a patient of Drs. Britton and Shaw, of Little York. I put into my instrument valise a cranioclast and perforator, as well as midwifery forceps.

1. From *Transactions American Obstetricians and Gynecologists*, Vol. III., 1888.

On my arrival I found the patient under chloroform, with strong expulsive pains, and the two enormously-swelled legs of a fetus between her thighs. The feet were almost pulled off, showing that the doctors had been making every effort to effect delivery, but without avail. They concluded that they had a monster to deal with, and thought that it was a case of ascites. This conclusion might readily be arrived at from the peculiar formation of the child. The tissues of the leg were edematous, and I concluded, after passing my hand, that the whole monster was edematous. From this manipulation I also diagnosticated twins, and felt a large blood-clot that had been poured out from the placenta between the two children. Before proceeding to do any abdominal operation I thought it advisable to make one attempt to deliver the child from below. I therefore cut through one thigh and applied the cranioclast to the bones of the pelvis, and then by one powerful traction succeeded in effecting a spontaneous delivery of the monster shown in the accompanying plate. The other twin followed after catching a foot, and was stillborn.

Examination: The whole body was edematous ; the legs swelled to three or four times their natural size. The upper part consisted of a large, rounded eminence, showing on section cyst-cavities filled with a clear, straw-colored fluid, and between the cysts connective tissue with its interspaces filled with fluid. No thorax, arms, or head present. An abdominal cavity filled with intestine in a much earlier stage of development than either of the twins, and also containing two kidneys. No stomach and no liver, spleen, or pancreas to be found. The sex could not be made out. A portion of the lower end of the spinal column was present, as seen in the plate, showing a posterior view, and it contained spinal cord. There was no maceration of either child, and the other was probably alive a few hours before birth. Development had evidently been early arrested in the upper portion of the embryo. Blood was found in various parts of the fetus. The kidneys and the other parts looked pale. An interesting question arises, "How is such a fetus nourished?" An attempt was made to inject the umbilical vessels, but was unsuccessful, owing to their brittleness. The cord looked like the cord of a fetus about the fifth month.

DR. E. N. BRUSH says that today no competent authority claims that diseases peculiar to women produce any considerable number of cases of insanity. *Per contra*, uterine treatment has been overdone, and gynecology has much to learn from psychiatry and neurology.—*American Lancet*.

THE STATE MEDICAL EXAMINING AND LICENSING BOARD.¹

By WILLIAM WARREN POTTER, M. D., of Buffalo.

It is the written law of this Society that the president shall, at the opening of each annual session, make to it a communication setting forth the condition of the medical profession in the State, and make such suggestions in relation to its improvement as may be deemed appropriate.

It is a fortunate circumstance that, at this time, there is in the condition of the profession so much to commend and so little to criticise. If we have not attained that degree of perfection which we could desire, if we have not yet reached the point where we can quit the ocean of endeavor and lie down by the still waters of Utopia, it is in part because we are human, and in other part because this is a progressive world, and its purposes are accomplishing themselves in broader and ever widening circles.

Nevertheless, it is a satisfaction that we are able to note some progress year by year towards that standard of medical excellence which, when attained, will enable our profession to take the rank which our supremacy as a Nation demands, and which our pride as a Commonwealth warrants. The contribution of this Society for the year 1890, looking to that end was

A STATE EXAMINING AND LICENSING BOARD,

which may be regarded very properly as the most important step taken by this State within the range of recent years in the direction of medical educational reform, and it signals with a good omen the beginning of the last decade of the Nineteenth Century.

For a period of time reaching back to the early days of this Society, the question of improvement in our methods of medical teaching and licensing has, in one way and another, been prominent at its annual meetings, and for twenty or thirty years past, the presidents of this body, with but few exceptions, in their annual addresses have laid emphasis upon the importance of some radical change in the prevailing system. There has been scarcely a year from 1824 down to the present, that the question has not come up in some form or another, either in debate or in formal address, so

1. Extract from the President's Inaugural Address, delivered in Albany, Feb. 2, 1891, at the opening of the Eighty-fifth Annual Meeting of the Medical Society of the State of New York.

that year by year the note of warning has been sounded on the subject of separating the teaching and licensing powers. More definite shape, however, was given to the matter some seven or more years ago, when the Committee on Legislation of the Medical Society of the County of Erie reported a plan for the complete separation of the "unfortunate, unwise, and debasing co-partnership of the educating and licensing powers." This was in the nature of a carefully drawn bill, which, after receiving the approval of the Erie County Society, was submitted to the several county medical societies throughout the State, and received the commendation of four-fifths of those societies. It was then presented to this Society through its legislative committee where it was also approved, and by this latter committee was presented to the Legislature.

It would be a waste of time to recount the various steps taken, and the ups and downs of the measure in its parliamentary struggles through both this Society and the several legislatures from 1884 onward, until finally the present law was evolved by the Legislature of 1890, receiving the approval of the Governor on June 5th of the same year. Suffice it to say, that its history during those seven long years of waiting is the oft-repeated tale of trials and triumphs, of defeats and disappointments; but finally the hour of rejoicing came, and we are now apparently near the realization of our long desired deliverance from the thralldom of a pernicious system which has retarded the progress of medical science in this State more than all other causes combined.

If the present law is an apparent modification of the original bill which this Society offered to the legislature, who will dare assert that it is not a better one? It is true the original thought prevalent in the minds of most of us was to obtain a single mixed board; whereas the law contains provisions for three separate boards, representing the three several state medical societies recognized by the statutes of the State of New York. But let it be remembered that although there are to be three boards, they are limited to a *single standard* in all the important and fundamental departments of the curriculum of medicine; and, moreover, there is to be but a single licensing body, namely, the Board of Regents of the University of the State of New York. Finally, the Medical Colleges are all bound, by the provisions of this law, to give three full courses of medical instruction in different years before granting diplomas, since physicians will not be admitted to the

examination for license with less preparation. And who can justly asseverate that this is not a better solution of the problem than the plan first proposed ?

It may be that our friends, the enemy — an enemy that appealed to all the weaker qualities of human nature to thwart our purpose, and who struck hands with any- and everybody who would aid in our defeat—it may be, I repeat, that they builded better than they knew, and that this Society has been placed in a stronger position than it would have been possible without such opposition. At all events, let us accept the law in good faith, sustain its provisions considerably and loyally, do all in our power to strengthen the hands of the Board of Regents which is charged with its execution, and then we shall enjoy the proud consciousness of having performed well our part in the great drama of medical progress.

If, on due trial, perchance there shall be found defects in the law, these can be remedied easily when experience shall point them out ; but, as a final word on this subject, let me urge upon this Society the importance of standing as a unit against any and all attempts to modify its present provisions or to break its full effect and force until it is thoroughly tested. Verily, let us love this law for the enemies it has made.

The first section of the law, "To Establish Boards of Medical Examiners of the State of New York for the Examination and Licensing of Practitioners of Medicine and Surgery ; and to further regulate the Practice of Medicine and Surgery" in this State provides that there shall be an examining board of seven members, representing the Medical Society of the State of New York ; that the power to appoint this board shall vest in the Regents of the University of the State of New York ; that such appointments shall be made from a list of nominees to be submitted from this Society ; and that the number of such nominees shall equal or exceed twice the number of appointments to be made. The first section of the law further provides that "each of said nominees shall be nominated by a majority vote at the annual meeting of the society with which said nominee may be in affiliation, and the names of the persons so nominated shall be transmitted before the first day of July, 1891, to the said Board of Regents, under the seal of and signed by the president and secretary of the society so nominating."

From this it would appear that this Society must, at this session, nominate a list of fourteen or more names to the Board of Regents, and that such nominations must be made by vote. While it must

be conceded that it is of the first importance that the men who are to compose this board must possess the highest character, ability, and fitness for the service required, and that the interests of all parts of the State should be conserved in their selection, yet, for obvious reasons, it is equally important that this duty shall be performed in a manner that shall interfere as little as possible with the scientific work of the Society. It is to be hoped, therefore, that some method may be evolved that will wisely, considerately, and adequately fulfill all the various requirements of this important function that the law has placed upon our shoulders.

To this end your patient efforts are earnestly invoked.

Society Proceedings.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON ORTHOPEDIC SURGERY.

SAMUEL KETCH, M. D., Chairman.

FEBRUARY MEETING.

DR. CHARLES N. DIXON JONES, of Brooklyn, reported a case of Congenital (Double) Equino-Varus, with exsection of both tarsi, and exhibited casts and photographs, as well as the patient.

Kate M., 11 years old. A few weeks after her birth the feet had been tenotomized, and an apparatus worn ever since. On February 29th both feet were operated upon by Phelps's open incision, and forcible rectification. In November of the same year a wedge of bone was removed from the cuboid in both feet. She was then treated by water-glass and plaster splints until early in 1889, when she disappeared for several months. On her return there was found to be a considerable relapse, with inversion of the feet and fixation of the joints of the tarsus. On November 29, 1890, the operation of Mr. Davies Colleys for resection of the tarsus was performed on both feet. At the end of four weeks the feet were in good position, and the wounds were nearly healed. This case was a very intractable one, and was the only one out of a number of cases of club-foot in the author's experience where it was found necessary to resort to tarsal resection.

The second case was one of resection of the astragalo-scapoid articulation for aggravated flat foot. The patient and photographs were exhibited.

K. K., 10 years of age. The deformity caused great suffering. On examination it was found that the inner side of the right foot in its whole length rested upon the ground. The astragalo-scapoid joint formed a well-marked prominence. On the 1st of February Ogston's operation was performed. The plaster splint was continued for eight weeks. She now walked comfortably.

Dr. Jones also reported two cases of excision of the hip for tubercular osteitis.

Tillie C., a delicate girl of four years of age, had suffered from the disease for eight months. Owing to high temperature and great pain it was decided to operate. The diseased bone was removed by a free incision, which gave exit to several ounces of pus. The diseased acetabulum was thoroughly curetted, and an extension apparatus applied. After the operation the patient experienced marked relief, and the temperature remained normal. The first dressing was removed at the end of a week, and the subsequent ones were made about every four days, with the patient under an anesthetic, and the parts were thoroughly curetted. The patient is able now to run and jump without any apparatus, and there is only one inch shortening.

The second case of excision was that of Annie M., who had had a tubercular coxitis for about one year. She was three years old, had never walked, and the pain was sufficient to seriously interfere with sleep. There was a fluctuating swelling over the joint. On November 3d a similar operation to that just described was performed, and the wound was treated openly according to the method advocated by Mikulitz. Recovery was rapid and uninterrupted.

The author felt confident that the frequent erosions of the joint surfaces formed an important element in the termination of the tubercular process.

Dr. V. P. GIBNEY said that he assumed that in the first case the club foot was probably the result of poliomyelitis, the anterior and posterior tibial muscles being chiefly affected; and that in the effort to bring down the heel flat-foot had been produced. He thought that a still further improvement would follow the division of the tendo Achillis. The case seemed to him to be a good illustration of the necessity of continuing the use of protective apparatus for some time after the separations, for the history stated that the patient while still wearing only a plaster or water-glass splint passed from observation for some time, and when next seen, the plaster had been discontinued and the case had relapsed. The child walked rather tenderly, and the ankles rolled outward. The left foot could not be brought to a right angle, and he

perceived in it indications of a probable relapse. In such an event, he would suggest that the astragalus be removed according to the method of Morton, of Philadelphia. Nothing is lost by the removal of this bone, because it is really subluxated forward, and the claim which has been made that after this operation, the malleoli rest upon the os calcis, is of no significance, as they rest there before the removal of the astragalus. He had been surprised at the ease with which he could reduce the deformity after getting rid of the astragalus.

Dr. ROYAL WHITMAN considered the result obtained in the case of flat-foot a good one, but he did not approve of this class of operations. In this instance, a child of ten years had been confined to bed for ten weeks. If the foot had been over-corrected, under ether, and placed in a plaster bandage for the same length of time, even without the use of any apparatus, the result should have been equally good, and with the help of the apparatus and exercise, a very much better result might have been obtained without any cutting operation. Such operations, in his opinion, were unscientific.

Dr. A. B. JUDSON remarked that the occurrence of flat-foot as a result of infantile paralysis was rather unusual; it more commonly resulted in equino-varus or calcaneo-valgus.

Dr. R. H. SAYRE did not agree with Dr. Judson that equino-valgus was rare after poliomyelitis when the anterior tibial muscle happened to be the chief one involved. The child was unable at present to hold the foot in that position in which it was normally held by this muscle. Under these circumstances, there is but little doubt that the deformity will recur. He did not believe that there was any such thing as a relapsed club-foot; such cases were simply instances of imperfect cures, in which the patients had been unable to voluntarily retain the foot in its normal position. A tenotomy of the tendo Achillis with retention of the foot for a long time in a corrected position would have answered in this case without any operation, although he thought the result obtained was one of the best he had ever seen after an osteotomy for flat-foot. Unless the foot could be brought to an angle of about one hundred and twenty degrees, locomotion, except with a high sole, was imperfect; yet, in all the cases of removal of the astragalus which he had seen, the feint between the astragalus and the tibia prevented the foot going beyond the right angle, and on this account he considered it

inferior to the other operations. Fitzgerald, of Melbourne, had advocated a method of procedure which might almost be said to consist in reducing the whole tarsus nearly to a pulp by a series of osteotomies, and then molding the foot into the desired position, and holding it there with a plaster bandage. His published results of operations on some very badly deformed feet certainly appear most excellent. Dr. Jones's exsection of the hip-joint had yielded a remarkably beautiful result, and certainly it was preferable to obtain a joint with such good motion than to endeavor as do many of the foreign surgeons to obtain ankylosis.

Dr. JONES said that he considered Dr. Gibney's criticism on his first case a very just one. As to the second case, it was difficult to describe the many difficulties that he had encountered, and he had come to feel that nothing short of the heroic method of Dr. Fitzgerald would ever make it a good foot.

THE CHAIRMAN presented a case which he had first seen in 1887. The young man was then in his fifteenth year. The family history showed freedom from rheumatism and joint disease, but there was phthisis on the maternal side. Nearly two years before this time the right knee became swollen, and one year later the ankles also swelled, and shortly afterward the left knee became similarly affected. His general health had always been good, and no cause could be assigned for this condition. Examination showed the right knee to be the seat of a large, doughy swelling; there was no pain on motion, and the movements of the joint were only limited by the mechanical obstacle offered by the swelling itself, and this only in extreme flexion. There was no elevation of temperature, either general or local. By hypodermic puncture a perfectly clear, colorless, syrupy fluid was withdrawn. He was treated first by plaster bandages, and afterward by elastic compression, counter-irritation, and systematic massage of the joints. The progress of the case had been slow and variable up to a few months ago, but since then it had been uninterrupted. There was still some fluctuation and enlargement of the right side, but he expected that the patient would ultimately recover completely. The case had been diagnosed as hydrarthrosis.

Dr. GIBNEY said that the case was interesting, both on account of its comparative rarity and the excellent result which had been obtained.

Dr. A. M. PHELPS had been accustomed in many of these cases of effusion into the joints, to open the joint and wash it out with a

1-2000 solution of bichloride, and he considered that it not only shortened the period of treatment, but was a safe practice, and gave equally good results as the more common method of treatment. He had often treated dispensary cases by this method, and after being in plaster-of-Paris for some time, they had been discharged in three months' time with good result. It was not uncommon to find fibrinous material as well as serum in the joint, and the removal of this along with the serum was beneficial, and the bichloride irrigation tended to excite a healthy inflammation of the synovial membrane, which hastened the process of recovery. We had been led to believe that these tubercular joints were always purulent, but he had occasion to examine many such joints microscopically, and had found the tubercle bacilli frequently present where there was no suppuration in the joint.

The Chairman, in closing the discussion on this case, said that it would be difficult to obtain the consent of most private patients to such an operation in a case like this, where there was so little disability or discomfort, and he thought the operation not only somewhat dangerous in itself, but liable to result, in a tuberculous case, in a general infection of the system.

The Chairman also presented a man, thirty-six years of age, whom he had first seen two days before. He gave a good family history as regards phthisis, joint and spinal disease, and said that he had enjoyed fair health excepting several attacks of rheumatism, the first of which occurred at ten, and the second at fourteen years of age. The third attack was severe, and occurred ten years ago, and involved only the right ankle. There was no venereal history. Two and a half years ago he was exposed for eight hours at night to wet and cold, and this was followed by pain in the left hip, passing down the side of the leg to the knee, and then across to the small of the back to the right hip. After that, he noticed his joints becoming stiff, yet there had been no pain, only a feeling of soreness upon motion. Both hip-joints have very little motion, adduction only allowing of the internal malleoli being brought within about thirteen inches of each other. The arms and hands are quite free, but there is slight restriction to the movements of the jaws. The patient states that he has been examined under ether, and that while under the influence of the anesthetic the motion of the joints was increased.

Dr. R. H. SAYRE said that the improvement which the patient had been instrumental in procuring, in his own case, by constant

efforts during the past six months to move the joints, suggested an appropriate line of treatment. Slight daily motions of the joints should be made while the patient is immersed in a bath at a temperature of 110-115 degrees. Such massage was more successful when aided by these hot baths, or by hot fomentations to the joints. He recalled one patient whose joints were so generally stiffened that she had been lying around almost helpless for three years, who, as a result of this treatment, was now able to walk without a cane, and with the motions of the elbows and shoulders very much improved. Such results were by no means exceptional, and he would be quite hopeful of decidedly improving this man's condition in the same way. When the joint is inflamed and tender, massage may render the inflammation sufficiently severe to cause ankylosis, but this man had been free from pain for a long time.

Dr. GIBNEY heartily approved of the suggestions which had been made, but he nevertheless believed that Dr. Sayre had had a singularly fortunate experience, and that usually these cases were very disappointing.

Dr. PHELPS said that if this were a case similar to the one exhibited in the museum as "the ossified man," the hips, vertebræ, and even the jaws would become ankylosed in spite of treatment.

The Chairman, in closing the discussion, said that he had seen a number of these cases, and his experience had been unfortunate. The case should be classified as a rheumatoid arthritis, and this disease terminates in ankylosis. There were times in the course of the affection when there would be temporary amelioration. He did not favor operative procedures in such cases, but he thought the patient might be benefited by a course of massage and baths at the Hot Springs.

Dr. R. H. SAYRE read a paper on *The Importance of Thorough Examination in Suspected Pott's Disease*. He said that although in childhood the signs of Pott's disease are usually so marked as not to be confounded with other troubles, in adults, especially in females, there are times when the diagnosis is not clear. In some cases of uterine displacement and ovarian diseases, the reflex pains, the posture and gait, may simulate Pott's disease so closely as to be mistaken for it by competent observers. Several such cases had fallen under the writer's notice.

In the first case, which the author related, a lady, twenty-six years of age, had received an injury of the right hip, which was

followed by severe pains in the back and lower extremities. These pains were worse at night, and were so severe that she consulted a prominent Philadelphia physician. He pronounced the case one of Pott's disease, and applied a leather corset. This made her worse, and there was loss of power in the arms and legs. The jacket was then removed, and she was advised to rest in bed for two or three years, but this advice was not followed. Two prominent New York physicians made the same diagnosis, and various braces and finally plaster were applied without benefit. She was still wearing the plaster jacket when she first came to the author. She could then walk only with difficulty; she was bent forward, and every jar caused pain. There was rigidity of the spinal muscles, and she complained of the girdle sensation, and of pains in the lower part of the abdomen and down the thighs. The uterus was found to be retroverted, and bound down by adhesions. An Alexander's operation, followed by the use of a pessary, faradism, and gymnastics, restored her to health.

The second case had had a spinal posterior brace applied by a London surgeon for supposed spinal disease. She complained of pain in the back and lower part of the abdomen. The uterus was retroverted, and the ovary prolapsed, and treatment directed to the relief of these conditions soon brought about a cure.

The third patient had worn various kinds of apparatus, and an examination showed a very slight knuckle in the dorsal region, which was thought to be due to an exaggeration of the physiological curve from her habitual stooping position resulting from the abdominal pain which she suffered. Her retroversion was corrected with a pessary, and she has since been free from pain.

The last case reported in the paper was that of an anemic girl, with a marked stoop, and a projection in the lumbar spine, with pain in the back, abdomen, and legs. She gave a history of dysmenorrhea, and the uterus was found markedly anteфлекed. Tonics and general faradism improved her, and she has been without any support for over a year, without increase of the symptoms of Pott's disease.

In summing up the subject, the writer said that the description of these cases showed that the mistakes in diagnosis had been made by men of large experience, and he had therefore thought it worth while to call attention to the fact that reflex pains from pelvic irritation might easily lead one astray in considering cases of supposed Pott's disease.

PATHOLOGICAL DISLOCATION OF THE HIPS.

Dr. W. R. TOWNSEND presented a specimen of this condition, which had been removed from an Italian girl, fourteen years of age. The head of the femur was very deeply eroded, and was dislocated on to the dorsum ilii. There was marked erosion of the pelvic bones, but no perforation of the pelvis.

Dr. TOWNSEND also presented a specimen illustrating acute arthritis in an infant of eleven months. There was no known cause for the condition which had lasted for two weeks prior to admission. There was a large gluteal abscess and the movements of the hips were somewhat circumscribed. As there were evidences of septicemia, an operation was performed with a view of securing proper drainage. The child died of exhaustion, and at the autopsy it was found that although the drainage was excellent, and the granulations appeared healthy, the head of the bone was eroded, and the external sinus communicated with the joint capsule. The viscera were perfectly healthy.

Dr. JUDSON said that the specimen illustrating pathological dislocation of the hip recalled a discussion which took place a few years ago on the question of the possibility of this dislocation. Dr. March, of Albany, argued that Dupuytren, Astley Cooper, C. Bell, Brodie, Listen, Fergusson, Miller, Gibson, Carnochan, and a host of other authorities were wrong in considering spontaneous dislocation in hip disease as a frequent occurrence. He declared that, as purely the result of morbid action unaided by superadded violence, it seldom, or never, took place. He visited forty pathological museums in all parts of the world, and failed to find evidences of this lesion. His forcible article in the Transactions of the American Medical Association, 1853, excited great opposition, and Dr. Hayward, of Boston, in his Surgical Reports, 1855, said it would require more specimens than would fill forty, or forty thousand museums, to convince him that a certain specimen, which he described, was not the result of spontaneous dislocation.

Before this discussion, spontaneous dislocation was supposed to be a very common incident of hip disease, in spite of the doubts expressed by Baron Larrey, and the statement by Wickham, in 1833, that it is of very rare occurrence. That dislocation is very often simulated when not really present, is not generally conceded. Dr. Gibney showed a specimen to the Pathological Society in 1877, in which dislocation was simulated by an appearance due to the

altered direction of the neck of the femur. But that it sometimes does occur, is clear enough from the fine specimen in Dr. Townsend's hands.

There is another pathological dislocation of the hip that is worth considering from an orthopedic standpoint, *i. e.*, that is thought to be produced by distension of the capsule in the synovitis following continued fevers, as set forth by Dr. Keen in the Fifth Toner Lecture in 1877. He had recently examined a convalescent from typhoid fever, in whom there was great impairment of motion, and a distended capsule. Osteitis was eliminated by the history of the case, and by the absence of atrophy and natal symmetry. The patient was warned against undue disturbance of the joint, and recovered without dislocation, and without any special treatment. The subject is practically important because it is generally believed that serious joint diseases not infrequently have their origin in fevers.

Dr. GIBNEY said that he would like to know whether Dr. Townsend thought the child might have been saved if the head of the bone had been excised. A number of years ago Dr. Yale read a paper on incision of the hip, before the Surgical Society, and among other conclusions he stated that the best antipyretic for septicemia was excision of the hip.

Dr. TOWNSEND replied that there was marked septicemia present at the time he had operated and drained the abscess, so that he doubted if the result would have been different had he excised the head of the bone. He thought, however, that any earlier operation would have saved the child's life. He had recently seen in Bellevue Hospital a man suffering from aggravated septicemia due to absorption cellulitis of the leg, who was so ill that it was feared he would die on the table during the amputation of the thigh; yet, instead of this, the amputation was followed by a very rapid improvement in his general condition.

BUFFALO PATHOLOGICAL SOCIETY.

STATED MEETING MARCH 13, 1891.

The President, Dr. CHARLES G. STOCKTON in the chair.

Dr. FRANK H. POTTER, Secretary *pro tem*.

Dr. PETER C. CORNELL applied for membership and presented the following report with specimens:

Captain Mc—; age about fifty. Health had been apparently good up to within a few weeks of his visit at the office, about the middle of last September, when he complained of being generally run down; of some pain in upper part of back between the shoulder blades, and a cough. It was considered that he was run down from hard work, and as examination of chest indicated only sub-acute bronchitis and a double aortic murmur, he was not thought to be seriously ill; a plaster and stimulating expectorant were ordered with advice to lay off a trip and recuperate. He continued at his work, but on his return two weeks later took to his bed. A marked change had now taken place and he had the appearance of being a very sick man; complained of shortness of breath; cough, with moderate expectoration of frothy mucus, and at intervals a slight quantity of pure blood. The pain between the shoulder blades, which had at first been slight, was now very severe and there was great prostration. A careful examination at this time showed congestion of both lungs and a tumultuous heart.

While the man was desperately sick, the diagnosis of the exact cause of his illness was not altogether clear, his serious condition not being entirely accounted for by physical signs. The expectoration of pure blood suggested the existence of an aneurism, but, inasmuch as until within two weeks of his death he had been an apparently healthy lake captain in active service, and the examination of his chest revealed no aneurismal sign, it was only considered as possible. Under the use of opiates he passed a fairly good night, his condition, however, showing no improvement; the expectoration of pure blood continuing with a little more frequency. This condition of affairs continued with a gradual growing worse until after midnight, when he was seized with a sudden gush of blood from his mouth, and died almost instantly.

Examination of the thorax, thirty hours after death, showed a moderate amount of pleuritic adhesions, evidence of bronchitis, and congestion of both lungs. Upon passing the hand posteriorly a large aneurism of the aorta was discovered extending from the fifth to the tenth dorsal vertebra, the bodies of which were almost destroyed by erosion; the remaining partition between the spinal canal being so thin as to crumble away during the examination.

In presenting this clinical memorandum and specimen, the following points are of interest:

First.—That such extensive damage to the principal blood-vessel and to the vertebrae should exist, and at the same time permit the man to continue at his laborious work.

Second.—That the physical signs and clinical evidence of aneurism, particularly such an extensive one, should be unappreciable.

Upon ballot Dr. Cornell was declared elected to membership.

Dr. B. C. JOHNSON then read, by invitation, the clinical history and reported the post-mortem following upon a case in Dr. Stockton's ward at the General Hospital :

HISTORY OF A CASE OCCURRING AT THE BUFFALO GENERAL HOSPITAL.

Patay S., aged thirteen; born in United States of Irish descent. Father living and healthy. Mother said to have died of pneumonia, after an illness of six weeks. Five brothers and five sisters. Of the brothers, two were of still birth and two died of cholera infantum. Two sisters dead, at the ages of one and three years respectively. Three sisters living and in apparently good health. Patient's occupation was that of a signalman, over hatchways upon canal boats, and had prior to his last illness enjoyed remarkably good health.

He was strong, well nourished, rugged and hearty. He had at times been in the habit of imbibing quite freely, sometimes even to intoxication, and was frequently exposed to inclemencies of weather, as by lying out in open air all night during the Fall and Winter months, averaging twice weekly. During early childhood patient was of unusually good health, having none of the eruptive diseases, save measles at the age of three.

Three months prior to entering the hospital he first began to be troubled with slight attacks of vertigo, lasting for a few minutes at a time, and occurring twice weekly for one month, when in addition to these he began to have pain in the temporal region, sharp and cutting in character.

He stopped work at this time and attempted to attend school, but the attacks occurring more frequent and blinding him for the time being, he was obliged to leave. He continued to have these attacks of about the same character until December 1st, three days prior to entering hospital, when they suddenly became of greater severity and at shorter intervals, occurring three times daily and lasting from fifteen to twenty minutes each time. They would commence, as did the others, with severe pain in the temporal region, head drawn backwards to a marked degree, becoming dizzy and he would fall were he not supported, yet losing consciousness none of the time. At the expiration of the attack he would feel no different than at any time. Appetite good but easily nauseated and vomiting soon as food entered his stomach. Upon entering the hospital his head was extended upon his shoulders with considerable rigidity, and upon flexing his head he would cry out with pain. Pupils symmetrical, yet somewhat dilated. Temperature normal, or not ranging above 99° F. He would lie in a semi-comatose condition, yet easily awakened when aroused, would complain of severe pain extending to the occipital region and constantly remaining in the temporal and frontal regions, with exacerbations of a more intense

character. He would lie perfectly quiet until these attacks came on, which at this time was about hourly.

At 1 P. M., December 5th, twenty-four hours after entering, during one of these attacks, not dissimilar to the preceding ones, with no premonitory signs or symptoms, no complaint of pain, no convulsion, respiration suddenly ceased, he became greatly cyanosed, muscles relaxed and pupils widely dilated. His heart was found to be beating and regular although feebly, and pulse not perceptible at the wrist. Sylvester's method of artificial respiration was commenced. It was found by the vigorous use of this method that the cyanosis was relieved, and the pulse reappeared at the wrists, yet upon withholding the artificial measures respiration ceased and never after was one voluntary effort at respiration noticed. In hopes that voluntary respiration would after a time commence, this method was kept up until 6 P. M., the heart remaining as strong in its beat, the patient making no move during the entire time, and upon withholding the artificial respiration cyanosis appearing and heart failing and patient becoming pulseless.

At 6 P. M., tracheotomy was performed by Dr. Stockton, and by means of a crude bellows with a soft flexible catheter attached to a tracheotomy tube, mechanical respiration was carried on.

During this time he had been given rectal enemata of warm coffee and brandy, hypodermic injections of tr. digitalis, and glonoin in ten and four drop doses respectively at two different times; also 1-60 grain of strychnia sulph., hypodermically.

At 11 P. M., movement was for the first time noticed, and again thirty minutes later slight flexion of both lower extremities occurred. From this time on he continued in about the same condition with incontinence of urine and making no voluntary motion until 1 A. M., when his heart becoming suddenly weaker he at last expired, exactly twelve hours after artificial respiration was commenced.

Autopsy, December 6th, fifteen hours after death, made by Dr. Bergtold. Body well nourished and showed several small bruises and excoriations upon the arms, (the result of artificial respiration).

Brain.—The superior longitudinal sinus was engorged with blood, also the dural vessels. Cortex remarkably dry and convolutions flattened. Vessels of cortex and pia mater were markedly injected. The pia mater over many sulci was opaque, white and thickened. No pus or miliary tubercles visible. Frontal lobes were mutually adherent by their internal surfaces. Pia at the base of the brain was somewhat thickened and opaque. All the ventricles were greatly dilated, fluid oozing up as soon as lateral ventricles were opened which were found to contain two ounces apiece of cloudy fluid. No fresh lymph visible anywhere. All of the tiamen adjacent to the lateral, third and fourth ventricles, were softened, wet and slimy. This includes the surfaces of the

corpora striata. optic thalami. ependema, corpus collosum, etc. From the floor of the fourth ventricle to the left side, there projected a small globular mass about the size of a split pea, which was fluctuating. Incision into it allowed considerable semi-solid granular matter to escape. The softening had also attacked the medulla, the interior of which was filled with semi-solid *débris*, while upon the outside gave a sense of fluctuation. Vessels at the base were a trifle more opaque than normal. No milliary tubercles seen along their course and no infarcts found. No thrombi found in any of the vessels of the brain, although careful examination was made for them. Weight of brain forty-six and one-half ounces.

Thorax.—*Pluræ* normal. Lungs normal, save a slight amount of congestion at each base. Slight amount of emphysema, and in the apex of the right lung was found a circumscribed mass of caseous material about as large as a chestnut; also, one of the right bronchial nodes had become caseated.

Heart, normal, save a slight amount of atheroma in very small spots in the beginning of the aorta, and an apparent thickening of the mitral valves, and upon one of its leaflets were three small bright-red petechiæ. No ulcerations. Heart full of dark, thick blood. Weight eight and one-half ounces.

Spleen, Kidneys, pancreas, and intestines, normal. Mesenteric lymph nodes enlarged. Stomach slightly dilated; walls thickened, and inner surface covered by thick, white mucus.

Liver, normal.

The paper of the evening was then read by Dr. W. H. BERGTOLD.

HODGKIN'S AND ALLIED DISEASES.

During the year 1889 there were reported, according to Sajou's Annual, in the various medical journals of the world, only five cases of Hodgkin's disease. The following is, therefore, reported principally because of this infrequency, and also hoping that it may lead to a brief discussion on its pathology, and to a comparison of the interesting points of relation of this malady to another closely allied.

CASE.—J. C., aged 27: family history unimportant, always healthy until one year previous to entrance into hospital, at which time the lymphatics at the angle of the jaw slowly enlarged, the growth gradually involving the cervical lymphatic chain down to the clavical, both sides being affected, the left later; patient felt weak and tired on exertion. Condition at entrance: Cervical lymphatics on both sides from angle of jaw to clavicle greatly enlarged, freely movable under skin and not tender; thyroid, slightly enlarged; axillary and

inguinal glands also increased in size. No noticeable splenic tumor ; no tenderness over bony surfaces or points. Is breathless on exertion. No record of urinary examination. From entrance until death, or about one and one-half years after the beginning of the disease, there was a steady progression of the symptoms ; the thyroid enlarged so much that shortly before death it so compressed the trachea that a tracheotomy was made to save the patient from immediate suffocation. About this time the right elbow began to enlarge, and became painful. Twenty days before death a count of the blood cells gave a result as follows : reds, 2,768,750 ; whites, 18,750 per cubic mm., a condition of leucocytosis not sufficient to be called leucocythemia. The normal number of reds being about 5,000,000 per c.mm., and of whites about 10,000 ; the reds thus here being reduced about fifty per cent. and the whites increased in about the same proportion. Death occurred from exhaustion. A few weeks before this event, Dr. Williams, the house surgeon, removed a small inguinal lymph node under cocaine and kindly gave it to me for study. An examination enabled me to make a diagnosis of at least lymphoma, with a tentative one of Hodgkin's disease, a blood count at that time excluding leukemia. Autopsy resulted as follows :

Post-mortem on body of male, apparently about thirty years old. High degree of emaciation ; rigor mortis not present ; ends of the bones entering into formation of right elbow markedly enlarged ; neck presented the closed wound of a recent tracheotomy ; cervical, axillary, and inguinal lymphatics markedly enlarged. Arch of diaphragm on both sides rose to the fifth rib. Right plura adherent at apex, otherwise normal, left also adherent at apex ; cavity contained about 100 c.c. of slightly bloody serum. The pericardium contained 50 c.c. of clear serum, otherwise normal. The heart was very small, weighing about 210 gm. ; myocardium seemed normal ; right and left endocardium, and all the valves were normal ; commencement of the aorta presented a few patches of atheroma, not calcareous ; left ventricular cavity very small, and whole heart empty. Lymph nodes at lower end of mediastinum enlarged to a diameter of about 1.5 cm. Lungs : right apex adherent ; adhesions old and firm ; firm interlobular adhesions ; no tubercles or nodules. Left apex adherent, old and firm ; no tubercles or nodules ; slight amount of purulent matter expressible from smaller bronchi of right lung ; bronchial lymph nodes enlarged to a diameter of 2 cm. pigmented in centre, and periphery of a pale yellow color, firm in consistency, and not succulent ; left bronchial lymph nodes same as right, but three, however, presenting caseous centers. Post mediastinal lymphatics greatly enlarged, some to 4 cm. in diameter, whitish yellow on section, firm, and not caseated or pigmented. Each lobe of the thyroid as big as a walnut (4 cm. in diameter). Spleen normal in size, slightly adherent at upper edge ; capsule not thickened ; substance on section presented round, whitish-yellow masses about 1 cm. in diameter, rather

firm, similar in appearance to the enlarged nodes found elsewhere. Kidneys: Left, normal in size, blue in color, firm, capsule adherent, cortex narrowed, no nodules. Right, contracted pale and firm; capsule adherent; organ contained no nodules. Adrenals were each enlarged, right more than the left, it being about 6.25 cm. long, 2.50 cm. broad and 1 cm. thick. Each contained nodules similar in texture and appearance to those of the spleen, but smaller. The intestines were injected, mesenteric lymph nodes were markedly enlarged; ascending colon exhibited several nodules on the surface of the peritoneum opposite the mesenteric attachment; these nodules were movable. In the ileum several Peyer's patches were markedly thickened, and on section gave a similar appearance as the nodules of the spleen. The retro-peritoneal lymphatics were greatly enlarged. The stomach, pancreas and liver seemed normal. The brain was not examined. All of the lymph nodes, the retro-peritoneal, post-mediastinal, axillary, mesenteric, etc., gave a like picture on section: namely, whitish-yellow in color, firm in consistence, not juicy and not caseated.

Microscopic examination of these various tissues gave results more or less in accord with the description of the lesions usually found in pseudo-leucocythemia. The marrow of the bones (sternum) seemed about normal, though if there was any change it may be said to be only a slight increase of the lymphoid elements. In the liver, there was a slight increase of connective tissue about the vessels and in the interlobular spaces, with, however, no new deposits of lymphoid cells. The liver, otherwise, was normal. The kidneys had some of the tubules replaced by connective tissue; much of the tubular epithelium was in a state of parenchymatous degeneration, and the capsule was thickened. The lung presented numerous areas of lymphoid tissue, each being placed near a bronchus; there was also marked emphysema and chronic interstitial pneumonia.

In the spleen was found a marked increase of trebecular tissue, and a complete diffusion of lymphoid cells, mixed with the usual spleen pulp and blood debris. The ordinary structure of Malpighian bodies, lymph cords, etc., was lost in this dissemination of new cells. There were also great areas which took stains poorly, and which presented the characteristics of coagulation necrosis. The lymph nodes all showed marked increased connective tissue stroma, and the ordinary arrangement of follicle, perifollicular space, etc., was destroyed, the lymphoid elements having disseminated themselves throughout each node.

Three bronchial nodes were caseous. All of these tissues were

stained for microorganisms, both by the Koch-Ehrlich method for the bacillus of tuberculosis, and by Gram's method for the usual other bacteria; in all of these stainings not a single germ was found, though I doubt not had the caseous nodes been searched closely enough, the presence of the bacillus of tuberculosis would have been found.

An examination of the names given to this malady at various times would enable one to gather a fairly good idea of it as a disease. Thus, from Trousseau's name, "adenia," one would be led to infer that there was an involvement of the glands, though we would not know whether a true secretory gland, as the parotid, was implied, or a so-called lymphatic gland. This is just as good a time as any to stop and call attention to the fact that the name commonly given to those collections of lymphatic tissue, known as lymphatic glands, is a misnomer, and that they are not glands at all, having no true glandular structure, and no excretory product or duct. Such collections are more properly termed "lymph-nodes." Wilk's name, lymphatic anemia, leads one to learn that the disease expresses itself in one direction as an anemia and of lymphatic origin, and necessarily severe because prominent enough to characterize the malady in naming it. This name is open to objection, however, for we have anemias with the so-called scrofulous enlargement of the lymphatics. But it is proper and well-chosen on the score that it reminds us that the anemia is secondary to the lymphatic changes, a point of much importance, inasmuch as it is not at all rare to find a certain degree of enlargement of the lymph nodes in anemia of the so-called primary origin.

Hodgkin's disease is also known by a number of other names, some of which may be incidentally mentioned farther on. That one given to it by Langhans is perhaps the best, he calling it "pseudo-leukemia lymphomatosis"; the name adopted as the title of this paper is chosen solely because of its being the most familiar to English readers. No brief definition can be applied to Hodgkin's disease. It is characterized by a progressive enlargement of the lymph nodes throughout a large extent of the body, or in the whole of the body, at times slowly and then again rapidly affecting different parts; with this increase in size there is no accompanying tendency to inflammation, suppuration, caseation, or confluency; there may or may not be enlargement of the spleen; there usually is great and marked anemia, and rarely a sufficient degree of leucocytosis to admit of leucoeythemia.

The disease seems to partake of an infectious nature, for the lymph nodes do not necessarily become involved by contiguity, but, on the contrary, the second locality may and often is quite remote from the primary manifestation; this is well illustrated in its well-established tendency to recur after extirpation of an affected lymph node. From its tendency in this direction Billroth called it "malignant lymphoma." This is also a very good name, for it commits no untruth in its meaning. The fact is often lost sight of, that the disease can with much propriety be considered a general infection of the body by a new growth, using the word in the sense that we call a cancer a new growth.

The disease attacks all ages, but is most common between the ages of ten and thirty, and rather rare in childhood; Henry, of Philadelphia, writes that while its rarity is at any rate confessedly great, yet it is particularly so with infants and in early childhood. There appears to be a preponderance of males attacked, about 213 of the cases falling to this sex. Guiteras believes it is more common in the South than leukemia, having seen six cases in eight years. As a rule it attacks the cervical lymphatics first, and often seems to follow along the course of a great vessel, *e. g.*, along the aorta, manifesting itself in the posterior mediastinum or the retro-peritoneal lymphatics. It is not essential, however, in order to have Hodgkin's disease, that we must have all of the lymphatics of the body enlarged. Osler has reported a case where the retro-peritoneal glands alone were attacked, though the patient exhibited other symptoms of the disease: it is also possible to have a patient suffer from splenic tumor, without any other lymphatic trouble, and yet here, as I will speak of later, it seems tenable to diagnose Hodgkin's, especially when some of the other symptoms are present. Two varieties of the lymphatic new growth have been described, the soft and the hard. This is a good distinction for gross anatomical purposes, but the distinction is based, histologically, on weak ground, for the two processes are essentially the same in each variety and both may be present in the same case. They differ only in the amount of connective tissue new growth present; there being an excess in the hard variety, and vice versa. Such nodules as occur in pseudo-leucocythemia, as Cohnheim termed the disease under consideration, have been mistaken for tubercles when found in the lung or the pleura. There is nothing to prevent a co-existence of tuberculosis and Hodgkin's disease, and I believe that this was true in the present case, basing my opinion on what may seem insufficient ground, to-wit, the caseated bronchial lymph nodes.

The lymphatic enlargement is due to a new growth of lymphoid cells and connective tissue; the splenic growth is found infiltrating the Malpighian bodies alone, or breaking through and disseminating. A section of such an organ gives a mottled picture; the attacked Malpighian bodies appearing as firm white or yellow nodes, while the surrounding splenic tissue appears dark and normal. These growths of lymphoid matter are apt to occur where we normally find such tissue, as in Peyer's patches, in the spleen, etc., but they may be found anywhere, in the lung, brain, cord, etc., and produce symptoms varying in accordance with their sites. The minute anatomy varies slightly; in a nodular new formation we may find an almost complete imitation of a true lymph node, with its trabeculae, lymph follicle and lymph cords, etc., with, however, a little more trabecular tissue than normal. On the other hand, a non-circumscribed growth may occur, and here the tissues are merely infiltrated with lymphoid cells bound together by a delicate reticular tissue. There rarely may be giant cells present. We do not find such aggregations of cells as are peculiar to tuberculosis, and this constitutes one point of the microscopical differential diagnosis between this disease and tuberculosis. As you know, we may have a diffused tubercular tissue with no miliary tubercles, and here one might have difficulty in differentiating the two. We would here have to rely upon the presence or absence of a tendency to caseation, and the presence or absence of the characteristic bacilli.

At times a group of superficial enlarged lymphatics may inflame and suppurate, but in such a case one is usually able to trace these changes to traumatism, such as the constant irritation of clothing, etc. At best this complication is rare; some authors state that caseation can also occur; I believe that this is not true, but that in such cases a tubercular cause can always be found. The spleen in the majority of cases is enlarged, but to a very moderate degree, and as a rule we find no implication of the bone marrow. The nodal enlargement may remain in *statu quo* for a long time, may increase in size, slowly or rapidly, and may even have periods of recession. In the case now reported the lymph nodes were decidedly smaller after death, particularly in the groin and axilla. This disease has been termed diffused lymphomatosis, and if one desires he can employ the name, for histologically the term is correct. The blood is usually altered more or less, as one would anticipate by such a profound constitutional disease; moreover, this is especially so if we believe that the lymphatics

have anything to with the manufacture of blood. There is an apparent increase of white cells, enough at times to constitute the condition called leucocytosis, but often not more so than is observed in healthy people after a hearty meal. The reds are as a rule greatly diminished in number, and this causes an apparent increase of whites, which really are only multiplied proportionally, not absolutely. Henry, of Philadelphia, argues that this change is due to interference of the pathological changes with the manufacture incidental to the disease. The anemia, therefore, follows the lymphatic enlargement, and thus the disease cannot be classed with the so-called primary anemias. There is usually no occurrence from which the disease can be said to have started. Cases have been reported where typhoid fever, whooping cough, and particularly post-partum hemorrhage have been credited with precipitating the disease. The diagnosis of pseudo-leucocythemia lies between it and tuberculosis, carcinoma, sarcoma, and lymphoma, when the lymphatics are principally attacked, and also lymphatic leukemia; and if there be a splenic tumor, one must differentiate between Hodgkin's and malaria, leukemia, the splenic enlargements of primary anemias, typhoid, carcinoma, and echinococcus of the spleen, amyloid spleen, the splenic enlargement of hepatic cirrhosis and *anemia splenica*. Some of these differences can be more or less easily discerned, as with malaria, typhoid, echinococcus, amyloid and the tumor due to hepatic cirrhosis. At times, however, it is a matter fraught with the greatest difficulties to determine whether a given case be one of primary anemia, leucocythemia, carcinoma, Hodgkin's disease, or *anemia splenica*. Cases have been reported illustrative of every shading between the closely allied forms, leucocythemia, Hodgkin's and *anemia splenica*; one must here wear his best spurs, not only in order to make a correct diagnosis, and thus help his patient if possible, but also to maintain his reputation, and to advance scientific medicine and medical knowledge.

Sarcoma of the lymphatics is rather rare; it attacks any node, spreads by contiguity as a rule, and is seldom diffused throughout the body. It is said also that with both carcinomatous and sarcomatous disease of the lymphatics the nodes have a tendency to become confluent and thus not remain distinct as do the nodes of Hodgkin's; the nodes in the latter disease feel like balls freely movable under the skin, a point to which Southey called particular attention.

Tuberculosis is apt to have other manifestations of its ravages present besides an involvement of the lymphatics. We are pretty sure to find indications of it in the lungs, joints, or bones, and if a nodule be extirpated we will surely find those persistent marks of tuberculosis, miliary tubercles, caseation and, in all probability, the characteristic bacilli. The chief difficulties of a differential diagnosis are between Hodgkin's and leukemia, with a moderate amount of splenic and lymphatic enlargement.

It is as long ago as 1832 when Hodgkin first described the disease now under consideration; in 1845 Virchow gave the name "leukemia" to that malady now more generally known as leucocythemia. At that time there was not the faintest suspicion that these two diseases had anything in common, and, in fact, it has only been since the more general use and perfection of the microscope that pathologists have discovered any relation between the diseases.

In speaking of leukemia, Delafield says:

. . . There is a form of disease in many respects, particularly in the lesion of the lymph-glands (nodes), identical with leukemia. There is, however, usually a less prominent involvement of the spleen, and what is more striking, no increase in the number of leucocytes in the blood.

. . . The lesions of the lymph-glands are identical in both diseases, and it is convenient to assign different names to them simply because for reasons which we do not at all understand, they seem to arise under different conditions, and to be associated with a constant difference in the character of the blood. . . . The lesions of the spleen are essentially the same under both of these conditions.

Indeed, so close are the lines of similarity between these diseases that Langhans suggests that they be classed under the head of "lymphomatoses" with two divisions or forms,—the non-leukemic and the leukemic. Of pseudo-leucocythemia it can be said that it has three varieties: first, that form where the lymphatics are chiefly involved, or the so-called lymphatic form; second, the form where besides the lymphatics we have the spleen also involved,—in other words, a lymphatic and splenic form; and third, a pure splenic variety, in which case the spleen alone is affected. So far as I know, very few cases of the last have been reported as such. If one pauses to think, it will be realized that to recognize a pure splenic form of Hodgkin's would be no small undertaking, for one would have so few points of differentiation. There being no increase of whites with Hodgkin's, it would be hard to decide

whether the enlarged spleen did not arise as a consequence of slow malarial poisoning; or, that it was not the seat of, perhaps, a malignant growth.

There are other various well-known conditions under which an enlargement of the spleen may be observed, as, for example, syphilis, obstruction to the circulation, as in hepatic cirrhosis, etc. Excluding all cases of splenic tumor unaccompanied by leucocythemia with any of the above-mentioned conditions as a cause, there yet remains a few cases where no cause can be traced. Friedrich, in 1865, described several cases of this nature. His anatomical description tallies almost exactly with that given of Hodgkin's disease.

Mosler, in *Von Ziemssen's Encyclopedia*, describes a class of cases termed hypertrophy of the spleen. These cases are of the nature of splenic enlargement, with no traceable cause, such as amyloid, syphilis, neoplastic, etc. In these cases the spleen may be diffusely affected by the new cells, or in small spots only. Section of the organ shows it to be either hard and firm, and of a uniform whitish-yellow color, or mottled and nodular. Microscopically, these changes are seen to consist of one of two conditions, either a marked increase of lymphoid cells, most abundant in the Malpighian bodies, but at times equally common throughout the whole organ; or a striking increase of the trabecular tissue. There may be all sorts of gradations between these two. This condition of enlarged spleen, with no traceable cause, as mentioned above, is, and has been, recognized as a distinct disease. Within the past year I have had occasion to see one such case, and, in thinking over the subject, the question arose in my mind whether this change could not be considered as the pure form of Hodgkin's disease. To my satisfaction, I found, on looking over the literature touching on splenic diseases, that this same idea had been brought out long ago by several observers, particularly Banti, Strumpell, Wood, and Henry. The last-named observer, in his brochure on *Anemia*, draws attention in particular to this form of disease under the head of *anemia splenica*, and H. C. Wood has spoken of it as the splenic form of pseudo-leucocythemia. The reasons for considering it a form of Hodgkin's disease are, briefly: First, that the alterations are strictly similar to those found in Hodgkin's disease; and second, the marked and profound anemia which sooner or later appears. Indeed, so destructive are the blood changes that hemorrhages are more or less frequent in this form of the disease, and

one may meet with extensive losses of blood, from the gums, into the pleural cavity, etc. The microscopic changes of the blood are pronounced; the reds are notably diminished, and are of many forms, such as we find in pernicious anemia; they are sometimes enormous, comparatively speaking, in size forming the so-called poikilocyte, and the word "poikilocytosis" has been coined to designate this condition irrespective of cause; again, we often find the red cells very small, the so-called microcytes. The whites are always relatively increased; sometimes there is a moderate degree of leucocytosis, and then, again, it may almost become truly leucocythemia; the marrow is frequently the seat of changes similar to those found in cases of profound primary anemia. It is found to be darker in hue, a purplish being most common, and there is a notable loss of fat, with an increase of the cellular elements proper, particularly of the medullated red cells. In the blood itself are frequently found these same nucleated red cells; they are also altered in shape, becoming larger, and at times elongated, a condition which led Henry to term this a reversion to the reptilian type. In the so-called third stage of this disease, that of cachexia and increasing anemia, we find the same marked debility as in Hodgkin's and leukemia. I draw particular attention to *anemia splenica*, for it is here almost alone that the operation of splenectomy promises and gives benefit. Of four operated on for relief from this form of splenic disease, three recovered. Of course, in a carcinomatous or echinococcous disease of the spleen, the operation is of considerable value, but in pseudo-leukemia, leucemia, and *anemia splenica* it is in the last alone that it gives promise of being beneficial.

If we follow Langhans in his classifications we are now led to the leukemic form of diffused lymphoma, and to this I invite your attention for a few moments, to consider very briefly some of the points of similarity. As quoted above, it has been said that the majority of changes, anatomically speaking, found in leukemia, are precisely similar to those of Hodgkin's. With leukemia, however, there are more and different varieties; the pure splenic, the mixed splenic and lymphatic, and the myelogenous forms, the latter being that form in which the disease manifests itself in the bone marrow alone; it is claimed, however, that this last variety is not tenable. With all the anatomical deviations from the normal, one must find, in order to complete the picture of leukemia, *leucocythemia*, that is to say, an alteration of the blood, as the word

signifies, where the white corpuscles are markedly and absolutely increased in number. Accompanying this there is usually a more or less profound and extensive destruction of the reds, although this may not obtain in every case, for there are a number of cases reported where the reds were only slightly diminished, yet the disease progressed to a fatal termination. It is stated that the combined number of the reds and the whites does not more than equal the normal number of the reds; whether this is true or not I cannot say.

A simple increase of whites, however great, without the characteristics, splenic, lymphatic or myeloid changes, does not indicate leukemia, for Von Jaksch has found that a persistent leucocytosis of a high degree may be present in certain chronic anemias, especially in that dependent on rachitis, and it may even be present in such acute diseases as pneumonia. It is an exceedingly interesting question why there should be found in two similar diseases, anatomically speaking; in one an enormous increase of the white cells, and in the other only a slight multiplication of these same cells or no deviation at all from the normal. The greatest block to the discovery of the true relation between these diseases is the paucity of our knowledge concerning the origin of the different corpuscular elements of the blood, and their relation one to another. As one writer has put it, "We can only put forth a hypothesis, and a weak one at that." The idea which has received as much support as any is that which assumes that the red cells are made from the whites, and that the workshops where this elaboration occurs are, in order of importance, the spleen, the bone marrow, and the various lymphatic structures and collections of lymphoid tissue throughout the body, to-wit, the nodes, Peyer's patches, etc. It is further assumed that to have the transformation go on to perfection, the white cells must be detained for a somewhat protracted time in these organs, and that anything which tends to hasten the circulation through these spots will cause an unusual number of leucocytes to pass on into the circulation. The well-known post-prandial leucocytosis is explained on such grounds: there is at this time, according to this theory, a splenic hyperemia and a consequent increased speed of circulation, with its assumed chain of hemic changes.

H. C. Wood, as long ago as 1871, made these keen observations:

Clinically, the so-called true and false leukemias are the same, save only in the matter of white corpuscles; all varieties of leukemia

are represented in pseudo-leukemia. . . . Evidently there are, therefore, two dyscrasiæ which in their natural history are precisely alike; two disorders most mysterious in their causes, most complicated in their life-features, most wide-spread in their lesions, and yet preserving, as far as can be discovered in the minutest detail, absolute identity, save only in the corpuscular elements of the blood.

It has been said that a given case of Hodgkin's disease would never show a sufficient increase of whites to justify one in saying that the disease had passed into leukemia. Latterly, there have been reported some cases where careful blood counts were made daily; it is of much interest to learn that in some of these cases the leucocytes rapidly increased in number shortly before death, and one can, perhaps, explain on these observations why nearly every observer has failed to see a case of pseudo-leucocythemia which progressed to the true form.

The changes of the blood occurring in leukemia, include not only the anemia and multiplication of the white cells, but also those that affect the very nature of these white cells themselves. Ehrlich was the first to call attention to this fact, and he, together with his pupils, has done more in this line than any other worker.

It has been found that the leucocyte, in its various phases, *i. e.*, as an inflammatory cell, a connective tissue corpuscle, etc., exhibits peculiar preferences for different aniline dyes. Thus Ehrlich found that all of the different varieties of leucocytes could be classed in three groups, including five varieties, which he named from alpha to epsilon; the division being based on the cell reaction when stained by acid, neutral, or basic aniline colors. Those cells whose granules take or select the acid stains are termed the (1) eosinophiles: they are colored deeply by eosin particularly, but also by acid fuchsin, aurantia, etc. Under the second division Ehrlich places all those leucocytes, or their modifications, whose granules are most intensely colored by basic aniline pigments; these are termed (2) basophiles. Gentian-violet, methyl-violet, methyl-green, etc., are incorporated by these cells with great avidity, and the cell granules are correspondingly stained. The third class includes those cells whose protoplasmic granules are most highly colored by such neutral aniline dyes as methyl-blue and acid-fuchsin combined, or by picrate of rosaniline, and to these the name of (3) neutrophiles is applied.

In regard to the significance of these facts it can be said that the basophile cell is found but rarely in the blood; it is more common in connective tissue as the so-called "mastzellen" and has but little interest for the diagnostician. The neutrophile cell is the

leucocyte common to the blood in health and leucocytosis ; while the eosinophile is only of rare occurrence in the blood as a normal constituent. It is, however, greatly increased in leucemia and slightly so in some other diseases.

The importance of these changes in the white cell can easily, on a moment's thought, be seen to be of great importance ; if one has a case of slight general lymphatic enlargement, or splenic tumor, with leucocytosis, and on examination of the blood it be found that there is a large number of eosinophiles present, then one is at once warned to be guarded in giving a prognosis, for the abundant eosinophiles stamp the malady at once, even though it be in its veriest inception, as leukemia, and not simple adenopathy consequent in anemia, syphilis, etc. Such a condition of the blood would also enable one to differentiate between Hodgkin's and leucemia.

Besides these chromogenic peculiarities, which are held to be correct and diagnostic by so thorough and careful a worker as V. Jaksch, there are also said to be differences in the morphology of the white corpuscles in the various varieties of leucemia. On this point V. Jaksch writes :

When large and small leucocytes—the latter predominating—are found in the blood, the leucemia is of a lymphatico-splenic character. When, on the other hand, the large cells alone are found, we are justified in concluding that the disease is splenic, with little involvement of the lymphatic glands or marrow. If many corpuscles of a transitional form are found, nucleated red cells, and especially large white multinuclear corpuscles, there remains no doubt that the bone marrow is the seat of serious changes, and the disease is of the myelogenic type.

The diseases which we have so briefly reviewed, form a remarkable group, and shade one into another with striking smoothness. While the points of distinction are of paramount interest—in one to the surgeon, indicating to him the utility or futility of removing a group of enlarged lymphatics or an enlarged spleen ; in the other demonstrating to the physician the uselessness of quinine as a therapeutic measure, and in the third giving both the surgeon and the physician a ray of hope in the possibilities of splenectomy—yet to us as members of a pathological society, it seems to me to be more interesting, and to be a deeper penetration into territory seldom visited by the average physician, to think for a moment on points concerning the ultimate causes of these maladies. Of course, it is needless to remind you that we are now just as densely ignorant of the

first causes of these diseases as we are of those of carcinoma or sarcoma. Westphal believes that leukemia is a specific infectious disease, although all his attempts to transmit it to animals have proven abortive. It is the fashion of the day to draw at sight on bacteria, and to hope that in some member of this great vegetable group will be found the essential cause of all such diseases as have heretofore baffled our efforts at a solution of their causes. Attention is now being drawn to the possibility of lowly organized animal forms, the protozoa, etc., acting as causes of disease, and such a relation will probably have to be sought for in those diseases as have failed to exhibit peculiar bacterial relations. We all recall the association of the plasmodium with malaria; the *filaria* with certain types of elephantiasis, the *ameba coli* with some varieties of dysentery and hepatic abscesses. Characteristic *coccidia* have been found in *molluscum contagiosum* by Pfeiffer and Neisser; in epithelioma by Malassez, and in Paget's disease. All of these are examples of the association of animal forms with disease, though the exact relations in these cases are hard to define, because of our insufficient knowledge. So far as I know, all attempts to cultivate these creatures have failed, and in this we are at once heavily handicapped. Koch, in his recent address before the International Congress, said that he had hoped and believed that these organisms would soon be artificially cultivated. It is hard to imagine what prevents an animal from developing Hodgkin's disease, if the affection be infectious, when some of the blood, or the lymphoid matter, is injected into the circulation of such an animal. And yet so much depends on what at first may seem trivial differences, that one must be exceedingly cautious if he tend to draw conclusions from repeated failures to transmit a given, supposed infectious disease. For example, it was long well known that chickens were peculiarly resistant to anthrax, and that a hen could withstand and, in fact, could not be infected with a relatively enormous dose of a pure culture of the bacillus anthracis; and until Pasteur proved that this was due to the fowl's normal high temperature, it was used as a fact that was said to controvert the truth of the ultimate relation which we now know exists between charbon and the bacillus of anthrax.

I do not believe it is at all visionary to hope that the coming few years will, perhaps, reveal protozoa or other animal form, as causes of the diseases now under consideration. These animal forms are commoner in the warmer temperate and torrid zones, being, perhaps, not rugged enough to withstand our colder climate.

This is true of the filaria, both of that form found in man and that found in birds. Sutton states that if a number of negroes, in some regions of torrid Africa, be taken at random and their blood be examined, that fully fifty per cent. will show filaria, even though but a very small per cent. may exhibit clinical evidences of disease. Guiteras, as mentioned above, says that Hodgkin's disease is more common in the South than leukemia, and, in fact, the number of cases which he met seems to show that the disease is itself more frequent South than North. If this be true, though no claim to this effect is made, it would be a mild parallelism to the greater prevalence of malaria, elephantiasis, etc., in southern regions, these two diseases being exemplified because of their supposed animal origin. It is not throwing too great a burden on some animal form to ascribe to it the changes found in leucocythemia: true, there are here great and apparent gross lesions present, but equally marked and manifest anatomical alterations are to be seen in both of the diseases just mentioned above, and they are admittedly of animal origin.

In reviewing the subject even as hastily and incompletely as I have, one thing impresses me with renewed force, viz., that with the instruments of precision which we now have at our command, we ought to spare no efforts in our investigations of such cases as we have spoken of tonight, and I feel that if the average worker would study his cases more closely much of great importance and good would result.

Personal.

DR. EDWARD N. BRUSH, formerly of Buffalo, and at one time editor of this JOURNAL, but more recently in charge of the male department of the Pennsylvania Hospital for the Insane, has recently been appointed medical superintendent of the Sheppard Asylum in Baltimore. The trustees of the Sheppard Asylum have secured an experienced and able manager, as well as an accomplished alienist, and we congratulate all the parties in interest.

DR. ROSWELL PARK, of Buffalo, has been invited by a number of physicians in this city to repeat here his Mütter Lectures on Selected Topics in Modern Surgical Pathology. The first lecture of the course was given in the Buffalo Medical College, Saturday evening, March 21, 1891. The others will be delivered Saturday evenings, March 28th, and April 4th, at 8.15 o'clock. All interested are invited to attend.

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EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed to the editors :
284 FRANKLIN STREET, BUFFALO, N. Y.

Editorial.

TWO MISCHIEVOUS BILLS.

THERE are two bills now pending in the Legislature of the State of New York which, if they should become laws, will serve to effectually block the wheels of progress in regard to reforms in medical education. The first, Senate bill No. 346, was introduced by Mr. Jacobs, February 9, 1891, and is as follows :

SECTION 1. Section eleven of chapter five hundred and seven of the laws of eighteen hundred and ninety, is hereby amended so as to read as follows :

SEC. 11. This act shall not apply to any student who duly matriculated in some legally incorporated medical college before the fifth day of June, eighteen hundred and ninety, or who began the study of medicine with some legally authorized physician prior to the fifth day of June, eighteen hundred and eighty-nine, provided that such student within three months after the enactment of this amendment shall file with the Secretary of the Board of Regents of the University of the State of New York, a certificate setting forth the fact of such matriculation or the beginning of such study, verified by the applicant ; and signed by the secretary of the faculty of the college in which he matriculated, or accompanied by the affidavit of the physician under whom he began the study of medicine, setting forth the time when such student began such study.

SEC. 2. This act shall take effect immediately.

Should this bill pass, it will practically nullify or make nugatory the provisions of the present State Medical Examiners Law for the next two years at least. It appears innocent, but is fraught with danger and should be defeated.

The second is known as Senate Bill No. 408, and was introduced by Mr. Collins, March 9, 1891. A similar bill was simultaneously introduced in the Assembly by Mr. Green. This bill practically creates a new system for the organization of a Medical Examining Board, in that it confers upon the faculties of Cornell University, Columbia College, Union University, the University of the City of New York, the University of Syracuse, the University of Rochester, Niagara University, and Colgate University, the power to nominate an Examining Board to consist of fourteen members. The underlying features of the present law are such that a complete divorcement of the teaching and licensing powers shall be wrought, which is the only safe basis for the construction of a State Medical Examining Board. The bill under consideration restores the licensing power to the faculties, and complicates unnecessarily the system which has heretofore prevailed. It subjects the new graduate to the expense of obtaining a State license, of a kind practically no better than the diploma that he has already procured from the faculty of his Alma Mater. If the State compels him to undergo the second examination, and charges him a fee therefor, should it not give him an equivalent for his expenditure of time and money?

There are many subtle and apparently innocent provisions of this bill that will bear careful study and analysis, but we have not the space now at command to devote to this important work. We advise those interested to procure a copy and weigh its features considerably.

The Medical Society of the County of Erie, in special session March 20, 1891, paid respect to it in debate, and afterward unanimously passed the following preamble and resolution offered by Dr. Thos. Lothrop, vice-president of the faculty of Niagara University:

WHEREAS, The Medical Society of the County of Erie has for many years earnestly contended for a State Licensing Board for physicians; and

WHEREAS, The membership of this Society includes the members of the Medical Faculty of the University of Buffalo and the Medical Faculty of Niagara University; and

WHEREAS, This Society has practically been without division upon the question of having a State Licensing Board, and also upon the principle that such board should be composed of men not engaged in the work of teaching medicine ; and

WHEREAS, After years of study and consideration the Legislature of last year did enact a law providing for a State license for physicians, the same to take effect September 1st of this year ; and

WHEREAS, Certain bills are now pending at Albany known as Senate Bill No. 346 and Senate Bill No. 408, which have for their object and purpose postponement of the operation of the law creating the State license for physicians and the further object of placing the said licensing of physicians in the hands of certain medical schools ; and in other ways changing the methods of State examination and State license in such wise as to destroy their prospect for usefulness, to the injury of the medical profession and to the prejudice of the public health ; therefore

Resolved, That the Medical Society of the County of Erie, for itself and on behalf of the Medical Faculties of the University of Buffalo and Niagara University, unreservedly disapproves of Senate Bills No. 346 and No. 408, and urges upon our Members of the Legislature to use all honorable means to prevent their passage.

JNO. A. PETTIT, *President pro tem.*

ELI H. LONG, *Secretary.*

It thus appears that the bills introduced in the Senate by Mr. Collins and in the Assembly by Mr. Green, were drawn without the consent of the faculty of Niagara University, and it may be that some of the other Colleges or Universities named in the bill have been made to bear unwilling testimony of their own disgrace. If so, it behooves them to make all haste to purge themselves as thoroughly of the very suspicion of evil as Niagara University has done with such commendable promptitude.

THE MEDICAL CORPS OF THE EMPIRE STATE.

WE TAKE unusual pleasure in calling attention to the following clipping from the editorial columns of the *Buffalo Morning Express* of March 7, 1891, which will be found of interest to many of our readers at this time, and we trust all such will give its subject matter thoughtful consideration, and have speech of the same, as well, to their neighbors :

IN THE INTEREST OF HEALTH.

Heretofore the relations existing between the people and the medical profession have been fixed by the profession itself, on the presumption that the patients exist for the physician, and that the ignorance and necessities of the people must administer to the pleasure and gain of the doctors. This relation will be radically changed after September 1st next. The State declares that on and after that date there shall be a medical profession for the good of the people. As the people know that they are comparatively ignorant of medicinal science, it is proposed that the doctors shall be kept under closer supervision and shall be duly licensed and declared competent by an official licensing board.

The Regents of the University of the State of New York will have the power to determine the qualifications and competency of our future doctors. The standard cannot be made too high. The right to practise medicine in this country is sometimes granted to men whose ignorance is simply criminal, and who would not be allowed to practise medicine in any other civilized nation of the world. When the Regents look into the matter to decide the measure of knowledge which shall be required, they need not go out of the United States for examples upon which to model their examinations. For many years the United States has maintained a medical corps, military and naval. The standard of requirements for the U. S. Medical Corps will be a safe and suitable standard for the future medical corps of New York. About 80 per cent. of the applicants for the U. S. Medical Corps are rejected as unfit, because of ignorance. Yet these applicants are all eligible to practise medicine in this State by reason of having medical diplomas from some so-called school of medicine. It may be objected that this standard is too high. This or any other standard will be considered too high by the men who are ignorant of science, yet regard themselves as possessed of the divine right to practise medicine. Every competent and self-respecting physician, however, will rejoice at the making of a high official standard. No others ought to be allowed to deal with the health and life of the people.

The New York State Board of Health reports 104,000 deaths in this State last year. Do not these figures show that the physicians of New York should only be recruited from the best material obtainable? The report shows the further significant fact that over 33,000 deaths were from specific contagious diseases. These cases ought to have been, in many instances, preventable. The matter of public health is so important that any discussion of a standard of medical proficiency lower than the highest attainable is out of the question. We have been too long accustomed to bear without protest the periodical visitations of such deadly scourges as diphtheria, typhoid fever and small-pox. No effort is too costly, no precaution too painstaking, and no skill too high for the work of preventing these epidemics.

The Board of Regents must see that the medical corps of the State of New York is composed of the best, and only the best, talent available.

Certainly the question inferentially therein propounded, What manner of a medical profession shall the early years of the twentieth century find in the Empire State? is one of the first importance, not only to every member of the medical profession, but also to every actual or potential citizen of the Commonwealth.

The position of the JOURNAL regarding the questions of State License for physicians, a higher standard of medical efficiency, a State Medical Corps, is too well known to require restatement. From the beginning of the movement we have been in it, and from the first we have maintained that the best attainable was none too good.

Now that the discussion of what standard of proficiency the Regents of the University shall maintain is on, we want a place, and we begin with the declaration, that the tests applied to the candidates for admission to the Medical Corps of the U. S. Army or Navy are not a particle too severe for the Medical Corps of the State of New York.

Should any of our readers think this inexpedient, unwise, or impracticable, we would call their attention to the almost inexhaustible fertility and productiveness of our modern civilization. In war or in peace, in science, art, or industry, the demand is never clearly felt and plainly expressed, without the supply being forthcoming; and what our people have been doing for the last century in science and industry, our medical schools and hospitals can do in medicine.

We have perfect confidence in the situation; whatever standard of medical proficiency the Regents may exact, that degree, and better too, the schools will furnish.

But some may urge: Granted that men may be found who will take the pains to so equip themselves with a generous medical education, is it after all necessary? To this very popular question we can only cite the universal experience of every civilized community, and remark that such experience will probably be a safe guide even for our own State.

Or, it may be urged that the demands upon the skill and capacity of the Medical Corps of the United States require a higher degree of ability than is required of the general practitioner, and upon such a contention we would like to remark, that nothing could be more absurd and unintelligent.

The surgeon in the Army or Navy has under his care a well-fed

and well-housed body of picked men, men selected for their soundness, men whose age exempts them from many acute and deadly diseases common to the very young and to those of advanced age, and the surgeon's care is to keep them well in the time of peace and to look after their accidents in time of war.

Now, for a moment, place this responsibility along with that which the civil practitioner has to carry, and see who has the greater need of ability, resources and efficiency. Space will not permit us to more than indicate the classes or kinds of work in civil life,—the reader can easily fill out the sketch. We would refer to the training of girls, the dangers of maternity, the care of infants, the treatment of the deformed, the management of those of evil hereditary tendency, the supervision of the public health in all of its various departments, the care of the various and varied casualties from the multitudinous wheels of industry, and the ever-present care and responsibility in the protection of communities against preventable diseases.

Surely no thinking person can for a moment maintain that in scope, in variety, in importance, the work of the military medical man can compare with the task of his brother in civil life!

Therefore, we demand, in the interests of the people, that the Regents see to it that the Medical Corps of the Empire State shall at least have as high a standard as that of the General Government or any of our sister States.

AN AMENDE HONORABLE.

For several years the JOURNAL has published the proceedings of the Buffalo Medical and Surgical Association. At the meeting held in September, 1896, in reply to an inquiry, Dr. Tremaine explained the methods used by a specialist in treating hernia, and in his remarks is reported by the secretary to have used the term "notorious quack." Names were not used, but the subject and its relations were supposed to refer to Dr. Mareley, who employs electricity in the cure of hernia. A suit for damages was at once instituted, which was subsequently withdrawn on satisfactory assurance being given that the discussion was incorrectly reported, the speaker asserting that the offensive epithet was not used. Dr. Mareley then brought a suit against the editors of this Journal, with Dr. Frank H. Potter, associate editor, and Dr. William H. Bergfeld, secretary of the association, for reporting and printing libelous matter, the complaint being subsequently amended by

charging the defendants with reporting and printing a falsehood.

The facts in this case are as follows: In the absence of the managing editor, Dr. W. W. Potter, the proceedings of the association were given to Dr. Frank H. Potter, to whom the publication of the JOURNAL for October was entrusted, and by him were sent to the printer. The associate editor failed to critically inspect the proceedings, and they were printed as they came from the hands of the secretary. The "offensive epithet," above referred to, was not observed. The responsibility for the report of the discussion rests entirely with the secretary, and its publication with the associate editor. The responsibility of the editors depends solely on their ownership of the JOURNAL.

It must be clear to our readers that the editors could have entertained no malice towards the plaintiff in this action. Dr. Marcle is a member of the Erie County Medical Society in good and regular standing. He is, as a consequence of such membership, a reputable physician. He has undertaken the special treatment of hernia by methods which the profession do not generally employ and claims to have met with success. We are assured by him that his methods are open to the inspection of the profession, if they so desire. We take the broad position that whatever his methods, if they bring relief to suffering humanity and add to the means now used for the cure of disease, we have no words of opposition to bring against them.

The policy of the JOURNAL under its present editorial management is to avoid all personalities and to endeavor to advance in its publication the interests of the profession. It is not the organ of any clique, or school, or party. Its monthly issue is at the expense of much labor and returns to the editors only the reward given to faithful service. In the case under consideration the facts as stated will exonerate the editors from any and all intention to injure the plaintiff in this action. The publication is a matter of regret. An amicable settlement has been made and the suit is withdrawn.

A LEARNED JUDGE.

THE *Medical Standard* for October publishes the decision of Chief Justice Thayer, of Oregon, in a recent malpractice suit, of which the following is a brief summary: He holds that the practice of the courts, in allowing juries to determine these cases, is unjust to the medical profession, because it encourages the institution of suits

against physicians. The surgeon cannot always be expected to achieve the success he desires, for the reason that causes for which he cannot be responsible may interfere. The average juror is unfitted to decide such cases, and the trial court should never allow them to be submitted to the jury unless the plaintiff has shown by proof that the defendant is guilty of the charge. People who devote their lives to relieving the suffering of mankind should be encouraged, and the way suits for malpractice are often conducted has the opposite effect, and is apt to leave the performance of many important duties to reckless and irresponsible empirics.

The decision of Chief Justice Thayer, of Oregon, is rational and just. The profession has long suffered from the injustice of jurors, whose prejudices and sympathies have given ruinous and unjust verdicts against physicians and surgeons. Men devote their lives to the study of their profession, render eminent service to their patients, and then are compelled to pay heavy damages because nature was too weak to respond to remedies. For quackery we have no sympathy. We would have them suffer just penalties for trading, in their ignorance and unskilfulness, with the bodies and lives of men. It is the surgeon, in particular, who stands most in need of the protection of such a rule as the Oregon judge lay down. The most skillful surgeon cannot be an insurer against the resistance of nature to his treatment.

The sympathy of the jury is usually with the plaintiff if advanced, and is grossly unjust in a judge to allow a malpractice case to go to the jury, unless expert testimony justifies it. The judge should be the protector of the physician against massed prejudice and sympathy, and should shield the plaintiff against unskilfulness and quackery. The physician is entitled to a few witnesses against the party sued, and the judge should be allowed to allow the case to go to the jury only if the evidence is such that the court grants a non-suit, unless the plaintiff can show a case. When a defendant rule when the reputation of the physician is at stake, and a heavy claim for damages is at stake.

Suits are often brought by poor patients, who are easily misled, or are instigated by lawyers who take the case on for a large reward. They are speculations, and should not be encouraged. Honorable men devote years to preparation for his duties, and they respond to the call of the patient.

as readily as of the rich, and, with few exceptions, the pecuniary results of their toilsome lives is small. Their reputation is sacred to them, and, while we have no plea for the quack, we invoke the protection of the courts against the speculative persecutions and prosecutions of men who give honest and intelligent service to their patients.

STATE MEDICAL LIBRARY.

THE following circular letter, issued by the Legislative Committee of the Medical Society of the State of New York, explains itself :

Dear Doctor—At the last meeting of the New York State Medical Society, a resolution, introduced by Dr. S. B. Ward, of Albany, was unanimously carried, urging the Legislature to take steps towards establishing a State Medical Library in connection with the General Library. In keeping with this resolution a bill has been introduced in the Senate by Mr. Sheard and in the House by Dr. R. P. Bush (known as Assembly Bill No. 926), making an appropriation of five thousand dollars annually and an additional appropriation of five thousand dollars for setting apart suitable quarters, building shelves, binding, etc., for the purpose of the above resolution. The consummation of this plan will be of vast benefit to the physicians of the State, as it is intended to keep on file all the important medical exchanges, to purchase all scientific books relating to medicine, and to send catalogues to the profession generally, in order that they may obtain, for a limited time, any volume on the shelves of the Library, on application, by paying the carrying charges. In order that this bill may become a law, a united effort on the part of the profession is essential. The session is about drawing to a close, and any work in behalf of this measure must be done at once. Will you kindly, therefore, personally solicit your Senator or Member of Assembly to advocate the passage of this bill, and if a personal interview is impossible, will you write them *at once* urging favorable consideration of the measure?

Very respectfully,

D. B. ST. JOHN ROOSA,

DANIEL LEWIS,

MAURICE J. LEWIS,

Committee on Legislation.

71 Lancaster St., Albany, N. Y.

At a special meeting, held March 20, 1891, the Medical Society of the County of Erie unanimously passed a resolution, introduced by Dr. Howe, asking the members of the Legislature from this county to actively urge the passage of the bill.

RAPID TRANSIT AGAIN.

ABOUT a year ago we called attention to the advantages of the Safety bicycle for the use of physicians. Chief among these advantages we mentioned the rapidity with which their visits could be made. Since that time a Doctors' Wheel Club has been organized with over twenty members, and we doubt not that the present season will see that number considerably increased. It is not our intention at this time to repeat what has been said upon this subject—it is the practical every-day demonstration of seeing many physicians making their daily visits upon "the wheel." This is the best answer to the prejudice or credulity of those who think the bicycle is simply a thing for sport and not a vehicle for business purposes. We desire merely to direct those who are contemplating the purchase of a wheel to the notice of the machine called the "Swift," that appears upon one of our advertising pages. The wheel is built by the Coventry Machinist Company, of Coventry, England, one of the oldest of makers, and who are particularly famous for embodying in their wheels the principles of simplicity and strength. The "Swift" easily ranks with the first of the high grade safeties, and has the reputation of standing an immense amount of hard usage without any part giving way. These wheels are built in various weights and sizes, thereby recognizing the fact that all men are not turned out of the same mold—the short, light weight man not requiring the same amount of weight that the large, heavy man needs. We believe a wheel can be selected from among the "Swifts" that will meet all that is required by a physician in the use of a bicycle in his practice.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO

Held its forty-fifth annual commencement at Music Hall, on Tuesday evening, March 14, 1901. The graduating class in medicine numbered seventy, and that in pharmacy thirteen, making a total of eighty-three. Hon. Jacob Stern addressed the Alumni Association, and Dr. John Wyeth, of New York, delivered the usual charge to the graduates. We go to press too early to give more than the brief notice of this interesting occasion, but hope to mention it at length next month.

The seventh annual announcement of the Spring course shows a steady growth in its usefulness and popularity. Several new

courses have been added to the curriculum and will, undoubtedly, add to its interest. Dr. Edward Clark will give a course of lectures on Diseases of the Rectum. We congratulate the college on securing the services of so able a teacher in the department that he has chosen as his specialty. Dr. Grant will give a clinical course on Diseases of the Eye, and will, undoubtedly, prove the wisdom of the Faculty in choosing him.

Professor Park will give a course that will prove of great interest and value on Experimental Surgery, using living animals for purposes of investigation in this line.

Dr. Bergtold will lecture on Minor Surgery and Bandaging, thus giving practical instruction in a department that is often slighted.

Dr. Benedict will lecture on Prescription Writing, giving, in addition to the necessary form, a number of useful prescriptions and therapeutic hints.

Dr. Crockett will take up the subject of Venereal Diseases in Women, a subject that is of especial interest from the effect that these diseases have on the future condition of the pelvic and abdominal organs.

The other lectures will be as during last year, except that Dr. Rochester's clinic on Physical Diagnosis will be held at the General Hospital instead of the Fitch Dispensary, and that he will give the general medical clinics Wednesday and Saturday morning, in place of Dr. Hopkins.

The course promises to be one of unusual interest, and we presume the recent graduates and advanced students will attend it.

STREET CLEANING IN LARGE CITIES.—This subject is discussed in the April number of the *Popular Science Monthly* by Col. Emmons Clark, of the famous New York "Seventh." The paper includes explicit practical suggestions for the proper performance of this important work, and it might be advisable for the Buffalo Common Council and the Street Commissioner's Bureau to subscribe for a few copies.

DR. JOSEPH PRICE, of Philadelphia, has recently completed a series of 900 abdominal sections, embracing every variety of disease and condition for which the abdomen properly may be opened, with twenty-seven deaths—a mortality of precisely three per cent. for the whole series. These sections embrace thirty-eight consecutive successful abdominal hysterectomies, and these latter include three

Porro-Cesarian sections. In the series are included fifty-four extra-uterine pregnancy operations, with two deaths.

This record readily gives Dr. Price the distinction of being the foremost American abdominal surgeon, and in some respects it has not been equaled in the world.

Obituary.

DR. W. B. SPRAGUE.—In the death on Monday, March 16, 1891, of Dr. William Bishop Sprague, of Pavilion, Genesee county loses one of its best-known and most skilful physicians while yet in the prime of life. The deceased, who was born in 1836, in the town where he died, and was educated in the local schools and at Temple Hill Academy, Geneseo, was a graduate of the Buffalo Medical College in the Class of 1857. He served for a time as resident physician at St. Mary's Hospital, Rochester, removing from there to Oneida county and thence successively to York, Livingston county and Pavilion, succeeding to the practice of his father, Dr. William M. Sprague, on his death. A member of the New York State Medical Association and president of the medical society of his county, he was a man of literary tastes and a clever writer, his contributions appearing in various papers, in *Harper's Magazine*, and in many other periodicals. His disease was kidney trouble. He had never married, and leaves a mother ninety-two years of age, and a sister—Mrs. Celia Lewis, of Pavilion. His funeral was largely attended on Tuesday.

DEATH OF DISTRICT-PHYSICIAN VAUGHN.—Dr. Frank Owen Vaughn died recently at his home, No. 247 Swan street. He was forty-four years old, and had lived here all his life. His death resulted from typhoid fever. He graduated from the medical department of the University of Buffalo in 1880, and began the practice of his profession on Swan street. A year later he was appointed a district physician and held the position until his death. He leaves a wife and daughter, and one sister—Mrs. Stewart Elder of this city. He was a Mason of high standing, a member of the Masonic Acacia club, and was also a member of the A. O. U. W., the E. O. M. A., the K. of H., the Erie County Medical Society, and the State Medical Association. Dr. Vaughn was held in high esteem by all who knew him. The funeral took place Sunday afternoon, and

the interment was at Forest Lawn. The Erie County Medical Society held a special meeting, March 20, 1891, and passed the following:

WHEREAS, Frank O. Vaughn, a member of our Society, and a graduate of the Medical Department of the University of Buffalo, 1880, and since actively engaged in the calling of his profession, succumbed to its arduous duties on the 18th day of March, 1891, therefore be it

Resolved, That we greatly mourn the loss of our late brother; that we lose in him an earnest and active member; a man of noble character, of candid and earnest demeanor, and a friend to humanity.

Resolved, That we tender to the afflicted family of our deceased brother our heartfelt sympathy in this, their hour of great bereavement.

Resolved, That we will attend his funeral in a body.

Copies of these resolutions to be spread on the minutes of the Society and sent to his family.

F. W. ABBOTT.	} Committee.
JOHN J. WALSH,	
J. G. MEIDENBAUER,	

DR. FRANK P. FOSTER, the able editor of the *New York Medical Journal*, has been appointed Librarian of the New York Hospital Library. No better man could have been selected. We congratulate the library accordingly.—*Medical Record*.

Book Reviews.

A TEXT-BOOK OF THE DISEASES OF THE EAR. BY DR. JOSEF GRUBER, Professor of Otology in the Imperial Royal University of Vienna, etc. Translated from the Second German edition by special permission of the author, and edited by Edward Law, M. D., C. M., Edin., M. R. C. S., Eng., Surgeon to the London Throat Hospital for Diseases of the Throat, Nose and Ear; and by Coleman Jewell, Lond., M. D., M. R. C. S., Eng. Late Physician and Pathologist to the London Throat Hospital. With 150 illustrations and 70 colored figures on two lithographic plates. Cloth, large 8vo, pp. xxiv.—580. New York. D. Appleton & Co. 1890. Buffalo: Otto Ulbrich.

Eighteen years elapsed between the first and second editions of Gruber's work, the first edition appearing in 1870, and the second in 1888. In the latter we have, therefore, the results of his mature judgment upon observations already made, as well as the record of new investigations. This has been rendered into English by Drs. Law and we desire,

along with others, to express our obligations to them on the clear and faithful manner in which their task has been accomplished. We appear to be reading an English book, so evenly has the translations been made, and this adds much to the pleasure of our study of it. The first part of the work contains the *Anatomy and Physiology of the Organ of Hearing*. The anatomical part is exhaustive and is really a treatise by itself. For reference, we know of nothing more complete—almost too complete we were about to say—appear in a text-book for students, though for reference, as we have just mentioned, it is invaluable. It occupies 107 pages, while the physiological part is contained within seven pages—in smaller type however. This great contrast reminds us of Gruber's remark. "Had the results of physiological inquiry in the same department been comparable to that of anatomical investigation, the position of otology at the present day might well have vied with that of the most advanced specialty." This statement should do more than attract our attention; it should stimulate inquiry and experimentation.

The chapters upon the *Examinations of Patients* are very full and of great value. The watch test of the hearing power Gruber considers imperfect, but as it is of easy application and of some merit, he gives a few very clear rules for its employment. Of the *Estimation of the Hearing Capacity for Speech*, he holds rather middle ground between Oscar Wolf, who considers it the most perfect method of testing the hearing power, and Hartmann, who thinks that the test is too complicated to insure accuracy. Of the *Modern Methods of Testing the Hearing Power*, those of Weber, Rinne, Gelle and Gruber are fully described.

Of the *Ability to Hear Better in a Noise* (*Hyperacusis Willisii*), this statement is made: "The author has been unable to accept any of the theories hitherto advanced, and he imagines that its cause must be referred to different circumstances, partly pathological, partly physiological, which may happen to coexist in the ear and bring about a condition favorable to the better conductors of a powerful auditory stimulus."

In the part on *Objective Examinations*, the author gives full account of the methods of examination of the nose and nasopharynx. Indeed, throughout the work, Gruber insists upon the importance of these parts as bearing upon troubles with the ear. Thus it is seen that the nose, throat and ear are being associated more and more in the minds of those who are studying the disease

of these organs. That is the only rational and correct division. We regret that the teaching bodies do not so recognize it, and appoint their instructors accordingly. We believe it is sure to come to this. The long existing associations between the eye and ear will be done away with; they have almost no connection in nature, why should they have in practice or in teaching? and the ear, the nose and the throat will be united in one specialty.

For anterior rhinoscopy, Gruber prefers his ear speculum, adapting the size to the case. He also speaks well of the bivalve speculum, but he does not mention Elsberg's trivalve, which, in our opinion, is the best nasal speculum yet invented. Zaufal's instrument is not considered with much favor. He says truly that less can be seen with it than with a large ear speculum, and that it must be introduced with the greatest care, as lesions may easily be caused by the sharp edge of the small end.

In regard to the difficulties of posterior rhinoscopy, he quotes, with approval, the statement of Schwartze, that in seven per cent. of his patients in whom a rhinoscopical examination was desirable, it was absolutely impossible; in twenty-one per cent., only isolated parts could be seen; fifty-five per cent. could be examined with ease; and seventeen per cent. only by much painstaking and quickness of manipulation.

The use of the air douche, with advantages and disadvantages of the various methods employed, receives careful treatment; indeed, nowhere do we remember seeing a more satisfactory consideration of this subject. The author makes a suggestion in regard to limiting the inflation to a single tube that seems of value. The method is as follows: "If the patient bends his head strongly towards one shoulder, the air may be made to enter the middle ear on the side turned away from that shoulder, especially if the nozzle of the air bag be inserted into the nostril of the same side as the ear to be inflated. At any rate, should air enter both ears, more pressure is felt by the patient in the one which is directed upwards." He is in doubt as to the correct explanation of this observation, but we can easily understand its importance in certain cases.

Passing now to the part on Special Diseases, we find the same clear and direct manner of statement, and the same thoroughness observed in the first part. We say this because it is impossible to notice in detail the many subjects here considered. We can only thus express our opinion as to the whole, and, for the rest, present a few things that have attracted us during the study of the work.

Eczema of the External Ear receives some attention, and a point new to the reviewer, is given in the differentiation between it and diffuse inflammation of the external auditory canal. If there is absence of perforation of the tympanic membrane, the case is probably eczematous. Perforation is generally present in long continued otitis externa diffusa.

A long chapter is devoted to the inflammations of the external auditory canal. These are of two varieties, the *circumscribed* and the *diffused*. In the first, the circumscribed (Furuncle), Gruber uses his medicated gelatine preparations. In the early stage he introduces the "amygdalæ auriums," or "aural ovoids," as they are known in England, of either one-sixth gr. of liquid of opium, or one-twelfth gr. hydrochlorate of morphia. He first washes out the canal with a four per cent. solution of carbolic acid (warm) and the gelatine-almond is then introduced. The effect of these almonds are twofold, anesthetic and antiphlogistic. This treatment is so successful that he no longer practises scarification.

The chapters on Affections of the Membrana Tympani are of special merit, and will be of assistance not only to the new student but to the physician who is familiar with ear diseases. The parts also upon Perforations and Artificial Drums and the chapter on New Formations of the External Ear deserve special mention. The long chapter on Inflammation of the Middle Ear is naturally one that will attract attention. When it is remembered that about two-thirds ($\frac{2}{3}$) of all ear troubles occur in the middle ear, the importance of this chapter is seen at once. It is very exhaustive and requires careful study. Gruber impresses upon us again and again the necessity of treating the diseases of the neighboring parts, viz., the nose, naso-pharynx, pharynx and mouth, including the teeth, if such are found, in every case of middle ear disease. We are reminded here of a recent statement of Goodwillie, to the effect that not every case of nasal disease is followed by disease of the ear, but that in almost every case of middle ear disease will be found some pathological condition of the nose. These two opinions, coming from opposite points of view, so to speak, Gruber being primarily an otologist and Goodwillie having devoted, in the first place, most of his attention to nasal diseases, indicates as strongly as it is possible the truth of the statement above, that these organs must be united in one specialty.

Gruber quotes without disapproval the practice of Killian in using a 20 per cent. solution of menthol in olive oil, to produce con-

traction of the turbinated bodies. From a large experience with menthol, we are prepared to say that it is not justifiable to use such a percentage in the nose. It is exceedingly painful, even in weak solutions, and must be employed with care. Referring to middle ear disease, with deafness sometimes seen in whole families, the author says: "In such cases the individuals generally possess delicate, easily perspiring skins, and they are often accustomed to regard the deafness which overtakes them, one by one, as an hereditary disease, when it is really due to nothing more than persistently neglected colds." Where there is neuralgia and middle ear catarrh, he says the teeth should always be examined, as often a carious tooth will be found to be the cause of the difficulty.

Want of space prevents a further analysis of this most important work. It will ever remain a monument to the science of otology. It contains in itself and by reference practically all that is known upon the subject today. It points out by indicating what is not yet known, the lines investigation must take in order still to advance the knowledge of the diseases of the ear. It is a work for constant use and will seldom disappoint those who consult its pages.

The publishers, Messrs. Appleton & Co., have presented the book to us in their best manner. The letter press is excellent, but among all the many points of merit in this connection must be mentioned the two colored lithographic plates with their seventy (70) figures of the membrum tympani in health and disease. Seldom have we seen finer work than these plates exhibit.

F. H. P.

A COMPEND OF EQUINE ANATOMY AND PHYSIOLOGY. BY WILLIAM B. BALLOU, M. D., Professor of Equine Anatomy, and formerly lecturer on Physiology, New York College of Veterinary Surgeons. Instructor in Genito-Urinary Surgery, New York Polyclinic; Surgeon to Bellevue Dispensary; late House Surgeon Bellevue Hospital, New York. With twenty-nine graphic illustrations, selected from Chauveau's Comparative Anatomy. Quiz Compend No. 12. Philadelphia: P. Blakiston, Son & Co.

There is a deal of information upon the anatomy of the horse contained in this small book. There is, however, one important and rather serious omission, viz., that of dimension. In many instances only weight and capacity are mentioned, and often nothing at all. In many readers' minds the first thought is how does this or that organ compare with that of man in point of size, and

this otherwise capital little book does not give the information. It is a handy little work to have within reach, and doubtless will be thoroughly appreciated.

J. P.

A COMPEND OF HUMAN ANATOMY, INCLUDING THE ANATOMY OF THE VISCERA. By SAMUEL O. L. POTTER, M. A., M. D., Professor of Theory and Practice of Medicine in the Cooper Medical College of San Francisco: author of a *Hand-book of Materia Medica, Pharmacy and Therapeutics*, etc., etc., etc.; late A. A. Surgeon U. S. Army. Fifth edition, revised and enlarged, with 117 wood engravings: also an appendix containing numerous tables and sixteen lithographic plates on the nerves and arteries. The Quiz Compend Series. Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut street. 1890.

This popular "quiz compend" has reached the dignity of a fifth edition. An appendix of forty-three pages, contains original tables and plates of the arteries, the cranial and spinal nerves and plexuses and the lymphatic nervous system. Now and then an inaccuracy creeps in, as for instance in plate four, page 251, where the gluteal artery is represented as considerably smaller than the internal pudic, sciatic or obturator arteries, whereas it is the largest branch of the internal iliac, and should be so represented. The student will find the book convenient and useful in preparing for examination, and the doctor will get in it, in a moment, almost any point upon which he has become rusty.

J. P.

ESSENTIALS OF MINOR SURGERY AND BANDAGING, WITH AN APPENDIX ON VENEREAL DISEASES. Arranged in the form of questions and answers. Prepared especially for students of medicine. By EDWARD MARTIN, A. M., M. D., Instructor in Operative Surgery, University of Pennsylvania; Surgeon of the Howard Hospital; Assistant Surgeon to the University, etc. Illustrated. Saunders' Question Compend, No. 12. Philadelphia: W. B. Saunders, 913 Walnut street. 1890.

This little book covers an extensive field of surgery, comprising bandaging, the preparation of antiseptic materials for use during and after operations, anesthetics, venereal diseases, etc. The descriptions are concise, yet clear, and evidently written by one who is perfectly familiar with the subjects considered.

J. P.

FOR SALE.

WE HAVE for sale, house and lot and good-will of a practice worth \$3,500 to \$4,000 per year, in one of the most thriving and beautiful villages in Western New York. Railroad town, water and electric light. For further particulars, inquire of the Editor of this Journal, 138 Delaware avenue, Buffalo.

• HYDROGEN DIOXIDE; A RÉSUMÉ

THE title of a paper by John Aulde, M. D., of Philadelphia, in the *New York Medical Journal*, for Dec. 27, 1890, in which he gives the pharmacology and therapeutics of the remedy. He concludes as follows: The most flattering commendations of "Marchand's peroxide of hydrogen (medicinal)" have been given voluntarily by numerous well-known authors and contributors to medical literature within the past few years, some of whom may be mentioned as additional evidence that the methods here recommended are worthy of further investigation: Dr. W. B. Clarke, of Indianapolis, Ind.; Dr. George B. Hope, Surgeon of the Metropolitan Throat Hospital, New York; Dr. J. Mount Meyer, of New York; Dr. Robert T. Morris, of New York; Dr. Paul Gibier, Director of the New York Pasteur Institute; Dr. R. Tharrest, of St. Cloud, Minn.; Dr. E. R. Squibb, of Brooklyn, N. Y.; and others whose names can not now be recalled. Dr. Morris refers to it as "the necessary peroxide of hydrogen," and I have found Marchand's product to possess in a remarkable degree the properties so essential to success—viz., uniformity in strength, purity, and stability.

1910 ARCH STREET.

MESSRS. TARRANT & Co. present to the profession two useful remedies, Tarrant's Seltzer Aperient, and Hoff's Malt Extract. The former is an agreeable effervescent alkaline laxative and anti-lithemic medicine; and the latter is a useful tonic and reconstructive agent. Those who are most familiar with these remedies in the treatment of disease speak in their loudest praise.

NEW ADDITIONS TO REMEDIAL AGENTS.

AMONG some new and convenient medicaments Parke, Davis & Co. announce are Mosquera's Beef Peptone, Malt Extract with Peptone and Urethral Bougies of Aristol.

Mosquera's Beef Peptone is entirely free from the bitterness of the Pepsin Peptones, possessing an agreeable, sweet taste.

Nutrition plays so important a part in modern therapeutics that any additions to eligible methods of nutrition are welcome. Malt Extract with Peptone makes an easily assimilable, highly nutritious combination of malt.

Aristol is regarded by many as quite as efficient as Iodoform in its antiseptic action, and it possesses the special advantage of being entirely free from odor. The Aristol Bougies should find a wide

application in the antiseptic treatment of the Urethra. Aristol is a substitute product of Thymol obtained by mixing a solution of Iodine in Iodide of Potassium with an alkaline Thymol solution.

MARIANI WINE.

THE official preparation of coca, the extractum erythroxyli fluidum may be given in doses of from 3ss. - 3ii. The use of this preparation is not always satisfactory. After employing the remedy, the thought has been suggested that perhaps the nature of its composition did not tend to overcome the local sedative action of coca upon the mucous membrane of the stomach. A preparation made differently, containing more of an alcoholic principle, might, theoretically, overcome this difficulty. It is possible that the article familiarly known for many years as "Vin Mariani" has the requisite composition. It has been used, as noted in printed records, for diseases of the mouth, throat, stomach, general neurasthenia and pulmonary tuberculosis. It has also been suggested in forms of cardiac disease. This note has been written to record the successful use of the preparation in cardiac irritability due to the irritation from the non-elimination of urinary products as shown by diminution of urea. *The heart here is frequently in a condition of tremor cordis, and marked muscular debility often remains after the function of the kidneys has become more normal.* Mariani wine has in our experience proved most beneficial in restoring and saving muscular force, and thus furnishing a better organ upon which other drugs may act more favorably.—*Brooklyn Medical Journal.*

A PLAIN STATEMENT.

Haverhill, Mass., March 7, 1891.

ANTIKAMNIA CHEMICAL CO., ST. LOUIS, MO.:

Gentlemen:—The Antikamnia sent me found a suitable case of neuralgia once. My patient had long been a sufferer from Hemicrania, and the pain was never more than partially relieved by Caffeine, Acetanilid, &c.

Upon the recurring attack, I prescribed Antikamnia, three grains every two hours. The first dose gave instant relief, to the great satisfaction of both myself and patient, and complete recovery was secured.

I shall hereafter use Antikamnia in preference to all other preparations, for the relief of Migraine, Sciatica and other nervous diseases.

Very respectfully yours,

CHAS. F. FOYE, M.D.

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Original Communications.

THE ANATOMICAL POSITION OF THE CAPUT COLI; DEVIATIONS FROM THE NORMAL TYPE.

By THOMAS H. MANLEY, M. D.

Visiting Surgeon to the Harlem Hospital, New York.

WHERE is the profession or craft so credulous or gullible as that of Medicine?

Let some one answer that if he can; and, then for the present, let us in a cursory way, direct attention to that disease of an inflammatory type, which arises in the tissues which enter into and are connected with the caput coli; besides, examine into those occasional vagaries of development, one of which is presented here.

At the inferior terminus of the spinal column, man has but the rudiment of a tail, which, however, is not free, but is attached to and is imbedded in muscular and other tissues. In the right iliac fossa we find the rudimentary cecum, a small tail or worm-shaped relic of the enormous pouch in which the final act of digestion is completed, in all the herbivorous mammalia. Its purpose in the economy of the human being is unknown, although it is often the seat of pathological changes, the etiology of which is not yet well understood. The caudal appendage, so-called, varies in length, and is usually in the peritoneal cavity. It is pervious, has usually an independent mesentery, a serous investment, a thick muscular coat, and its mucosa is continuous with the colon.

The caput coli is not a blind pouch, as its name implies (cecum) but is a direct continuation downward of the large intestine, and is entered at an angle, about two inches from its terminus or base, by the ilium, at which point we get the ileo-cecal portal. It normally may be regarded like the ascending and descending colon, the duodenum and rectum as one of the fixed viscera, i. e., it has

like them a stationary immovable position and has *but a partial investment* of peritoneum. That it is but partly covered by the peritoneum is self-evident and incontestible, else it could not be a fixed viscus, for it is retained in position and intimately incorporated with the cellular tissues, along its posterior boundary.

Occasionally the caput coli has a long free mesentery, a mesocolon, when it is nearly wholly enclosed by the peritoneum and may slip down and through the inguinal canal, or make an excursion across to the left of the medium line, or in other directions.

Now, recently, particularly since the appearance of Frederick Treves's observations on the peritoneum were published, in which he took the ground that the cecum is *always wholly* covered by peritoneum, many surgeons maintain the same view and deny that it has any investment, except this serous membrane. Accordingly, in consonance with this view, we are taught that typhilitic abscess is always within the peritoneal cavity,—a doctrine which is as deceptive and dangerous as it is without foundation or support.

How can any one who has eyes and the use of them admit any such preposterous assumption, and especially he who has access to all the standard works on anatomy?

It would seem that the modern views and theories on localized inflammatory changes about the cecum were as irrational and inaccurate in many respects, as are the dicta relating to its structural anatomy at variance with all former teachings and as untenable. Looking on the caudal appendage as the *fons et origo* of these pathological changes, as a prophylactic and curative procedure it is snipped away at its root with the caput coli. Hence, inflammation involving the walls of the bowel itself, or the cellular tissues, are to be hereafter wholly ignored and we must have no more typhilitis. But, unfortunately for the theory, we do have every grade of inflammation, ulceration and suppuration in the adjacent areolar tissues when the appendix is entirely free from implication.

These iliac phlegmons, they say, are always intra-peritoneal or outside the general peritoneal cavity. Now, as a matter of fact, particularly speaking from a surgical standpoint, what do we find when we open on to a perityphlitic abscess from behind? Immediately on reaching the suppurating mass, after dividing the fascia transversalis, we come on the cellular *investment* of the pyogenic membrane. Dividing this, we at once enter the abscess cavity. This may extend in every direction, upward behind the lumbar fascia, or downward into the pelvis; but the peritoneal cavity is not

untainted, unless the abscess-wall burst directly into it, which is seldom the case. Certainly the position and extent of the abscess will vary, according to the situation in which it develops ; but, even when the disease giving rise to it starts in the appendicular elements, it will invest it with an envelope of fibro-plastic substance and take on adhesions with the mural peritoneum, so densely and intimately as to preclude one from being able to isolate, the one from the other ; and from this time, and all time, as far as that goes, the serous laminæ of the compromised peritoneum *are* so altered organically that their physiological and histological functions are *no longer* obvious. The endothelial layer is permanently destroyed. Those pyogenic cysts, which so commonly wall in diseased appendices, always, singularly, take a backward and upward direction, pressing the lax muscular tissues away from the iliac fascia.

It is of vital importance, then, that this disposition of pyogenic formation in the right iliac fossa be clearly understood, or else the practitioner, operating for the first time, may inflict much needless injury ; whereas, in commencing the line of attack in the right direction, the peritoneal cavity is wholly avoided, the pus-sac can be effectually drained and less liability to hernia will follow, after cicatrisation of the wound.

MARKED ANOMALIES IN THE POSITION OF THE APPENDIX.

In a recent report submitted by one of our deputy-coroners and the family physician of the deceased, in which a civil suit was instituted by the family to recover life-insurance, one of the doctors employed by the plaintiff showed me the following short paragraph which particularly attracted my notice. The doctors in their report said that : " Having opened the peritoneal cavity, nothing abnormal was noted until the cecum was exposed, when no trace whatever of the appendix could be seen, nor was there any evidence of scar or cicatrix." Although this statement is scarcely explicit enough, as it does not say absolutely that the appendix was wanting, yet one can scarcely put any other construction on the language employed.

On writing to my friend, Dr. Wm. O'Meagher, the deputy-coroner on duty at the time, he tells me that in his capacity as a military surgeon during the late war, and in forty years practice, during which time he made some six or seven hundred autopsies, he had never met with a similar case, and, as the appendix did

not come into view in this instance, it was presumed absent. He said that the caput coli had a broad attachment posteriorly and was not disturbed. This, undoubtedly, explains the reason the caudal appendage was not found. Recently, in making an autopsy, I discovered that no appendix could be found by the most painstaking search, in the peritoneal cavity. In order to positively assure myself that no oversight had been committed, I made a second transverse incision upon the superior spine of the ilium on the left, to the right side, thereby laying bare the entire cecum, yet no trace of the appendix could be seen. Now, gradually detaching carefully the cecum, which had a very broad cellular investment posteriorly, I came on the missing loop, the appendix, which was coiled on itself, imbedded in the cellular elements on the surface of the iliac fascia, entirely outside of and behind the peritoneal cavity. The appendix was four inches long and entirely pervious. There was no trace of inflammatory thickening, or any previously diseased condition in its vicinity. The cecum itself was of great capacity, being, when distended, more than nine inches in circumference, six inches in length, and nearly five inches in width. More than one-third of its surface was imbedded in the cellular tissues. The ascending colon, all the way up to the hepatic flexure, was of nearly double its normal dimensions and had a very broad cellular insertion.

Quain, Gray, Maglisse, Wilson, Darling and Holden, with the French anatomists, Bichât, Cloquet, and Delpesch, each and all say that the appendix usually, normally, lies free within the peritoneal cavity. Treves is the only author of distinction who claims that the cecum is wholly surrounded by peritoneum. It is accordingly noted that the singular situation of the cecum and the concealed position of the appendix, here reported, is quite unique. Since I made the dissection I have had a communication from Dr. W. M. Van Cott, of Brooklyn, N. Y., who tells me that, in making more than five hundred autopsies, he never encountered but a single case in which the caudal appendage was wholly behind and concealed by the posterior wall of the colon.

The surgical importance of this anomalous position of the appendix cannot be over-estimated when, through pathological changes, operative measures are imperative. Of this I was made aware practically, some time since, when I was called in consultation to see a case in which this arrangement obtained, the first time I ever met with it in the living subject.

The patient was a sailor, who, two years previously, in the Azores, had, he said, a very severe attack of "inflammation in the bowels," and thereafter, from time to time, noticed a thick flocculent matter in his urine, which always appeared at the end of the act of micturition.

Always after each recurrent attack of violent, colicky pains in his right groin this discharge would appear in considerable quantities, when he would experience marked relief.

From the commencement of the attack, which now confined him to bed, none had been seen in his urine, and to this fact he attributed the aggravation of his symptoms.

His physicians believing that there was an abscess formation near the cecum, invited me in to see him on the sixth day after the development of his latest attack. He then had high fever, with a quick pulse. There was total loss of appetite and great bodily weakness present. A distinct fulness could be seen and outlined over, and in the right iliac fossa. The abdomen was tender over its entire area.

I agreed with the medical attendant in diagnosis and advised an immediate operation. But the family would not consent until another practitioner saw the case. He regarded the localized fulness attributable to impaction and recommended abundant and often-repeated enemata. His instructions were fully carried out, but without any benefit, and the following day I operated. Commencing the primary incision on a line parallel with Poupart's ligament, in about its center, I carried it upward about four inches and was soon within the peritoneal cavity, on the bare cecum. This was a little disappointing, for I expected to meet the abscess wall before the intestine was exposed. Now, being within the peritoneum, I sought for the appendix, but there was no trace of it, nor the presence of extensive adhesions, in which it might be imbedded. Just now one of the doctors present ventured that a mistake in diagnosis had been made. But, gently moving my fingers about, I detected fluctuation *behind* the cecum and made another incision farther backward and was gratified to find a large accumulation of matter, which issued up in increased quantities when pressure was made on any part of the abdominal surface, thus indicating how extensively the matter had penetrated through the retro-serous tissues. By widely separating the lips of the incision, the tip of the appendix could not be seen, and no attempt was made to remove it. With the aid of abundant irrigation and rigorous antisepsis, after an enormous mass of purulent matter, feces and *débris* of exposed tissues came away, the wound finally healed and he perfectly recovered.

Unless the general peritoneum is invaded and the appendix is opened, I never make an attempt to remove it, and in no instance in which I have operated, by free incision and drainage, has there been any relapse: nor do I regard an appendi-ectomy, at all, as a necessary measure when the pyogenic membrane thoroughly walls off the serous-cavity. After perforation it undoubtedly cicatrizes, atrophies and is no longer a possible source of inconvenience or danger.

It may perhaps, in this connection, be permissible to cite from Hurd's essay (*Med. Age*, March, 1891,) who, quoting from Gottman, says: "that many mild cases of typhlitis are not diagnosed at all, and that ninety-five per cent. get well. Gottman, in eleven years in the Moabit hospital, had ninety-six cases of iliac-phlegmon, and five only dying. There would have been as many deaths he says if they had all been operated on." This is carrying prejudice too far, yet any candid unbiased observer of the present, will, without hesitation, undoubtedly admit that the tide has turned the other way and we may often operate when there is no pressing necessity, and we may leave our patient worse off, than if, perhaps, nothing was done whatever by way of surgical interference.

302 WEST FIFTY-THIRD STREET, NEW YORK.

NOTES ON THE USE OF KOCH'S LYMPH.

Special Contribution

BY DR. E. THORNER, Berlin.

All records published up to date of cases treated with the lymph are necessarily incomplete, because they have been under observation only a short time. In view of the many serious objections raised against the use of tuberculine, it behooves us to decide whether it is a desirable agent in the hands of the general practitioner. The question assumes a greater importance, because the lymph can now be obtained quite readily, and the former excuse that it could not be purchased, is no longer of value.

The objections raised against the use of the tuberculine can conveniently be classed under the following heads:

1. It can produce a too powerful reaction, the fever following an injection can be of a very high degree, and the treatment can even be followed by collapse.

2. Tuberculine can produce hyperemia in different organs; hemorrhage in the lungs; in the brain serious disturbances and coma.

3. The local swellings formed with the reaction around tubercular nodules can become dangerous if situated, for instance, in the larynx or trachea.

4. Nephritis has been caused by the lymph, and in albuminuria an increased excretion of albumin has been observed.

5. Pneumonia of a peculiar form, pleuritis, as well as localized inflammations of the lungs have been observed to follow the injection. But the most serious objection made is that through it the bacilli are driven into the general circulation, producing miliar-tuberculosis.

6. And, lastly, it is claimed that tuberculine is unreliable, its action uncertain, especially in old and in quite recent cases.

Against these objections we can bring the long series of brilliant results obtained by Dr. Koch, himself, and verified by a long list of careful, unprejudiced observers. Personally, I have had the lymph since November 20, 1890, and, although I have used it in a large variety of forms of tuberculosis, I have had only one fatal case,—a boy, *æt.* fourteen, who suffered from lung, laryngeal, and intestinal tuberculosis, and was already in an advanced stage of fever when he came under my treatment in the first week of December. The injections were given with the greatest care, beginning with 0.5 mg., and increasing slowly. The fever remained, but the general health, as well as the lung and throat symptoms, improved somewhat; the intestinal trouble, however, grew worse, the diarrhea increased and could not be stopped, and, as I was afraid of a perforation of the intestines, the injections were discontinued on January 8th. At the end of January the boy died, but the tuberculine has been beneficial in every other case treated by me; even cases with large cavities in the lungs improved. A gentleman, *æt.* thirty-eight, who had tried all forms of treatment at the different health resorts, had an enormous cavity in one lung, but no fever, when he came to me. Under the influence of the lymph the bacilli in the sputa decreased as well as the quantity of the sputum itself, and the patient, up to date, has gained seven pounds in weight. The cavity in the lung remains, but it can be assumed that it is clean today. Two other cases of severe lung trouble have improved considerably, although it would be folly to talk about a cure after so short a period of observation. Several cases

treated in the earliest stages of lung tuberculosis show no symptoms of the disease, whatever, today ; of course all these favorable results cannot overthrow the objections raised, and we must consider seriously what care has to be exercised by the general practitioner in order to avoid dangerous consequences.

Before Dr. Koch published the formula of the lymph, the wildest speculations as to its action were frequent. Today, we know that the glycerine extract contains only one per cent. of the active principle. If, therefore, a patient weighing fifty *k.g.* receive an injection of 1 *cg.* of the tuberculine and a reaction occurs, then the result is obtained by a quantity which stands in proportion to the body weight as one to five hundred millions. There are no many substances which will act in such minute quantities.

We can claim for tuberculine that it produces an increased activity in the tubercular lesions. The living bacilli excrete a substance which slowly produces a necrosis of the surrounding tissues. We add to this the action of the injected tuberculine and the combined activities are sufficient to form a coagulation necrosis around the nodule, and a line of demarcation between the healthy and diseased tissue, which prevents a farther penetration of the bacilli into the sound surroundings. The cheesy degeneration which we have considered as an unfavorable symptom, when viewed from this new standpoint, becomes a protective measure of the body against further invasion of the bacilli. When left to itself, the necrosis is not sufficiently a barrier and the bacilli can penetrate it and enter healthy tissues, but when we add to the excretion of the bacilli itself the tuberculine, the dividing line is formed rapidly and the bacilli die or are eliminated, as the case may be.

Hopes were entertained at first that tuberculine would ensure immunity to the body against attacks of the *bacillus tuberculosis*, but over 1,000 experiments made on animals seem to settle the question ; and, although our hopes for immunity have not been realized, we know for certain that the animals are safe against any infection by the bacilli as long as they are under treatment by tuberculine ; and right here it is well to notice that animals can bear a dose from 1,500 to 3,000 times as large as man.

From a therapeutical standpoint we have, at least, a large variety of important remedies with which to combat the unfavorable symptoms that may arise from the use of tuberculine. The severity of the reaction fever can be undoubtedly lessened when we use very minute

doses. The initial injection should be one *mg.* for each fifty *kg.* of body weight and increased slowly. If the patient loses flesh during the early stages of the treatment, we can interrupt it for one or two weeks and begin again with very small doses. As a rule, the patient bears the second series of injections better than he did the first, and a too strong reaction is thereby avoided. To guard against collapse any symptoms of heart disease or organic lesions, as well as extreme youth and old age, should make us very careful in the use of tuberculine. A possible brain hyperemia prohibits the use of the remedy in cases of tubercular basilar-meningitis, unless the prognosis is more favorable after trephining. As the lungs can become hyperemic from an injection, its use cannot be recommended after a recent hemorrhage, but some time and a complete rest of the patient is necessary before beginning the treatment.

One of my patients who suffered for many weeks from lung hemorrhage, has improved very materially since the use of the lymph, and has not had any attack now for ten weeks. The initial hemorrhage, which is so often the first symptom of lung tuberculosis, never prevents me from using the tuberculine after a certain lapse of time for the patient to rest.

Severe swelling of trachea and larynx are, of course, more dangerous in cases of lupus than in the ordinary forms of tuberculosis, and in such cases the physician should always be prepared to perform tracheotomy; hence Koch's method is inadvisable in country practice where patient and physician live a long distance apart. The localized inflammations observed in the lungs after the injection are beyond doubt swellings around tubercular nodules and disappear, as a rule, in the course of the treatment.

Pneumonia, due to the tuberculine, becomes dangerous on account of the severity of the fever and the reduction of air surface in the lungs. Hence, its use is contra-indicated in cases of pleuritic exudates, pneumothorax and anywhere where the air capacity has been materially reduced from one cause or another; in such cases the existing troubles must be cured first before beginning the injection of tuberculine. In the same way an existing nephritis contra-indicates the use of the remedy, because the increased tissue change in the body requires healthy kidneys for its elimination.

The most serious, however, of all objections raised, is that the tuberculine liberates living bacilli, throws them into the general circulation, and thereby produces a general in the place of a local-

ized tuberculosis, and that the so formed general tuberculosis is not affected by the tuberculine.

I do not deny the possibility of such occurrences, but doubt the latter inference, because in experiments made on animals such a general tuberculosis was amenable to treatment by tuberculine, just as well as other forms.

That the remedy does not influence very old or very recent tubercular nodules may be accounted for by the varying conditions of the circulation; in the former it can prevent the access of the tuberculine to the nodulé, while in the latter the bacilli have not excreted a sufficient quantity of substance to permit a combined action of tuberculine and excretion; we can assume, however, that repeated injections will attack these most recent nodules just as well.

When we now place all the objections to Koch's method in one scale and the discouraging prognosis of tuberculosis in the other, we must admit that in tuberculine we have found a remedy which *can* work injury, but the application of which is *most* beneficial and almost harmless *if applied early enough*; for when the majority of the complications have not yet appeared, the fever is either very light or totally absent, and small tubercular nodules can be eliminated with ease.

Of course the early diagnosis of tuberculosis is most important, and the possession of a good microscope and well trained capacity to use it are absolutely necessary. The mere name of "bacteriological microscope" or "oil immersion," is not sufficient; such instruments should have been tested by experts to demonstrate their usefulness. Taking these points for granted, the general practitioner will be often called upon to diagnosticate tuberculosis in its early stages, because as family physician he knows the patient, the family history, and can often determine the presence of the disease long before the patient thinks himself sick. The physician, however, who can diagnosticate cases of recent tuberculosis must also be in the position to treat and cure his patient with the most modern remedies. Certainly a patient would rather allow his family physician to treat him with the tuberculine than place himself under the care of a stranger or go to a hospital. Not until every general practitioner knows how and when to use the tuberculine, will the hopes be realized which its famous discoverer expressed, when he presented this unique remedy to the world of science.

[Since Dr. Thorner wrote the above, he tells me that all his

patients, up to date, are doing well under the treatment, and that some of them have increased as much as twenty pounds in weight ; but he strongly advises to continue the treatment not only until all the bacilli have disappeared from the sputum, but until repeated injections of guinea pigs with the sputum fail to produce any tubercular lesions in these animals.—TRANSLATOR.]

15 ANHALT STREET, APRIL 3, 1891.

A YEAR'S PROGRESS IN MEDICINE.¹

By P. M. WISE, M. D.,

Superintendent St. Lawrence State Hospital, Ogdensburg, N. Y.

ANOTHER wave of time has left its impress upon its eternal sands, since last the members of this Association gathered under the roof of our gracious mother. In the infinite lapse of years, it will be a mere forgotten atom, and even in the span of our own generation, it will, perhaps, be one of many marked with no unusual incident, yet it has been pregnant with hope and despair to some. We meet here year by year, as the speed of time increases with departed and departing youth, and grasp the hands of fellows who, side by side, remain true to the impulse that first led them here. Since we last met as an Association, some of our brethren have gone to their long home. The work of their life has been laid aside, and they have passed to the great majority. May they rest in peace and meet the reward that is held for the faithful !

Others have come to join us, and are looking hopefully in the rose-colored dawn of professional inspirings to a future of progressive success. Alas ! my young brother, prepare for disappointment, but in this gladsome hour do not become infected by the pessimism of the white-haired brother by your side. Keep your youth, with its hopefulness, as long as you can, and let its tonic infection do for your client what you will often fail to meet with therapeutics. Cheer with natural exuberance as long as you can, for cheer you must, whether the heart be burdened and the marks of sorrow have effaced the smiling countenance. The smile must always come, the words of hope must find utterance, the presence of the physician must be surrounded by an atmosphere essentially its own, characterized by comfort and hope and cheer.

The year has been prolific in theories and discoveries that will

¹ An address delivered before the Alumni Association, University of Buffalo, March 24, 1891.

mark it for generations to come. Perhaps no one occasion of medical advance has been attended with greater popular excitement since the time of Jenner, than the announcement of Koch that a culture of tubercle bacilli after specific preparation would cause a reaction easily recognized in cases of tuberculosis. The diagnostic value of the Koch process is undoubtedly very great. Its curative properties have been over-rated, but so short a time has elapsed since its introduction to the profession, that it is eminently unfair to judge its therapeutic properties. From what we know of it we may feel that it involves a principle which in some form will modify the terrors of a disease that to millions of families has been a veritable scourge. It is a great step in the bacteriological treatment of disease—and lies in the course of the most probable advances in medicine and the most wonderful discoveries. Like the etiology and pathology of diseases the specific poison of which has been found to reside in fibrionic material, so in the cure of such diseases and as a resistance against them, the signs of the times indicate that some modification of the poison will prove a strong factor. In surgery, among other important progress, it has been shown that tissues of the lower animals will unite with human tissues. This opens an immense field for experiment and research. The continual advances in abdominal surgery has not been checked during the past year. In all branches of medicine there has been an activity that has never been equalled in the history of our noble science and the outlook has never been brighter. In the care and treatment of the insane, regarding which I can speak to you with more positiveness, there has been established in this State by statutory law, a principle that I hope will live to the end of time, and that is, that such sick as are legally exempt from crime and are legally incompetent through insanity, shall become the wards of the Commonwealth, where their care and treatment can be established and supervised on broad and human lines and not be left to localities. In this connection it is gratifying to note that this neglected disease in the past is receiving more and more attention as its importance demands. In my own recollection within the past twenty years, it has been my fortune to witness a gradual and marked progress in the knowledge of insanity on the part of the general practitioner as manifested in certificates of insanity. It is gratifying to note also, that our own *alma mater* was among the first colleges in the country to enlarge her curriculum to embrace this as a study. There is within easy reach unusual opportunities

for the study of insanity in one of the best hospitals in our country, and, in this respect, it far exceeds the advantages presented by the larger metropolitan schools. Its executive head, who is also an instructor here, is an acknowledged leader in his special work, and no excuse exists for the graduate from this school at the present day who fails to carry with him a good working knowledge of insanity. Brethren of '72 and previous, we may rejoice that what was denied us is assured to our children.

One particular province of the family physician, in close connection with his professional work, is in the line of prevention of nervous diseases and insanity in his capacity as family adviser. I never lose an opportunity of emphasizing this fact and the diversion may be charged to my weakness. The amount of good work that can be done in the education of families, by impressive illustration of the evils of injudicious training of children and daily living and habits as well as the evil results springing from unwise marriages, upon occasions that are only presented to the family physician, can hardly be measured. The word of the doctor outweighs that of the minister or the lawyer in the family council. From the *colica flatulenta* of infancy to the *colica menstrualis* of womanhood; from the præputial to the seminal period and thence to the climateric and to senility, his words of counsel prevail in the serious family conclave and in the closet. How often by a discreet word might he avert calamities that to his practised eye can be foreseen. What more noble function than to point out plainly and practically, not in theory, the avoidance of a road that leads to chorea, epilepsy, insanity and death and, perhaps, worse than death; that strews a life-path, holding possibilities of comparative ease and happiness, with the thorns of sorrow that spring from avoidable causes? O, if some thoughtful physician had but given a word of warning! This is not an infrequent cry. It comes from retrospection. It has been caused by ignorance.

The teaching of physiology in schools is beginning to show some good results in a more enlightened youth. We may look forward to a day when the physician's struggle with ignorance will be lessened; when he can appeal to reason and not to prejudice; when our law makers will have reached a degree of intelligence sufficient to legislate for other than political purposes, and when the public health can be protected from the greatest of all degenerative causes—heredity.

The neurotic diathesis is more difficult to meet than any other

of the constitutional tendencies to disease. The influences that operate toward development of nervous disease where there is an existing predisposition are subtle. The so-called moral causes are excitants, and the habits and manner of life are potent factors. The training of youth is an opportunity for preventive medicine that, it seems to me, has never been given its full share of attention. for physical discipline in nerve development plays as important a part as education in the training of the mind. When degeneration has positively asserted itself the danger cannot be averted, but there can be no doubt that the unstable nervous elements can be strengthened by proper physical and mental training. In this field lies an opportunity that should not be withheld and cannot be lost. Some measure of comparison is presented in the undeveloped, or arrested development of nerve organs. Here we have healthy structure, but without growth.

In the neurote we have growth without stability. Now in either case development is the only means at our command,—in one case through stimulation of developed structure, and in the other case through physical renovation a reformation of structure. Functional growth can also be directed by intellectual means.

Among the causes of the increase of insanity,—or rather the increase in the aggregate of insane, for I do not admit that primary occurring cases of insanity are increasing,—it is a very noticeable fact in institutions that much of it is due to the secondary insanities; that is, to insanity that follows some other expression of disease of the nervous system. Thus formerly it was the rule to receive three cases of primary insanity in an acute form from five admissions, while now it may be safely stated that the three are insanities that are the culmination of degenerated nerve structure in its portean forms. In a corresponding ratio the recoveries have decreased. Without entering any other reason for this, it is my only purpose to emphasize the necessity to recognize the increasing tendency to nervous disease other than insanity; and also those expressions of weak, non-resistant organizations, that may luckily for themselves pass their generation without a breakdown, but unluckily for posterity procreate weak and unbalanced organizations that *will* break down and that will help to swell the increasing army of neurotes.

A question that makes an alienist wish for rest, is one that is aimed at him constantly with the expectation that it will be answered concisely in a few short, sharp, crisp words, "Doctor, what is the cause of insanity?"

Alas ! that it might be answered without viewing the long catalogue of foibles and weaknesses and vices of the human race : that one might look to some mammoth cause against which could be directed the whitest light of investigation, and the mightiest power of elimination. But the myriads of subtle, creeping, insidious sources of degeneration sapping the foundation of healthy nerve structure, transmitting to progeny its acquired weaknesses in increased measure, and culminating in that perversion of the ego, — that is death in life. This the student of causes stands amazed before. How can it be met ? This is a question for this and the succeeding generations. Surely it seems to me there is no method short of thwarting the procreation of the “unfit” and fostering the increase and “survival of the fittest.” Until the necessity for race preservation actuates legislators, the only amelioration lies in the mission work that can be done by our noble army of health counselors.

It is to be hoped that the vital question of increased accommodations for the healthy growth of our medical school will receive appropriate attention at this meeting of the Association.

Whether far removed from its active life or in the midst of it, we all have an abiding interest in its success. The medical department of this University has a history that we may feel a common pride in, and it is sincerely to be hoped that the great need that now exists for increased and larger accommodations may be met in some satisfactory way. The committee appointed at the last annual meeting will report their progress. What we can do as a body or as individuals in strengthening their hands should be willingly, lovingly done, and although we may not relieve the necessity, we may aid its final accomplishment.

Hot water is one of our best remedial agents. A hot bath on going to bed, even in the hot nights of Summer, is a better reliever of insomnia than many drugs.

Inflamed parts will subside under the continual poulticing of real hot water.

Very hot water, as we all know, is a prompt checker of bleeding, and besides, if it is clean, as it should be, it aids us in sterilizing our wound.

A riotous or rotten stomach will nearly always receive gratefully a glass or more of hot

Medical Mirror.

The treatment of ocular defects by means of glass, beside the optical correction, a factor of no less practical importance—their mechanical adjustment. The purpose of this paper is to direct attention to some of the mechanical aspects of the subject, particularly to the principles involved, and the methods of mounting spectacle-glasses.

The results of the most accurate refractive measurements are entirely vitiated by a faulty position of the correcting lenses; not only so, but new sources of eye-strain may be created by means adopted to remove an existing fault. Corrective lenses, remedial agents, just as orthopedic appliances are, and are as powerful for evil as well as good, and hence everything that comes to them falls within the duty of the prescribing physician.

The optical centre of a lens is generally that part of the lens through which we wish to bring before the pupil, as it and the lens immediately surrounding it are freest from aberrations—distort least. Occasionally, however, it may be necessary to displace this point by a definite amount; in any case, the optician must insist on having the optician carry out our directions in the manner of mounting and the position of the glass with the exactness that he employs in making it of the proper shape.

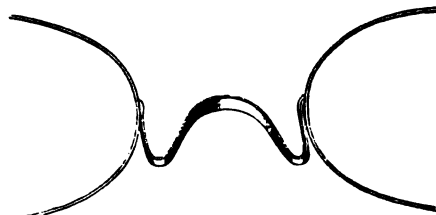
The purpose of the spectacle-frame is to hold a pair of lenses before the eyes in a definite position and with the proper

being known throughout the optical trade under the name *saddle-bridge*.

Previous to the introduction of this bridge it was not practicable to obtain spectacle-frames suitable for persons with unusual forms of nose or face or with excessively prominent eyes or long lashes. Then, beside the ordinary "regular bridge," there was nothing better in use than the "X-bridge," or the equally unsatisfactory "snake-bridge," in both of which the combined weight of the glasses and frames was often borne directly upon the crest of the nose, besides which they usually failed to place the glasses in the correct position before the eyes. Few could wear either of the latter with comfort, and those who succeeded often did so only by padding them with wrappings of thread, thus making an unsightly cushion at the point of contact with the nose.

The bridge (Fig. 1) under the plan referred to consists of (1) a nose-piece of arched form, of flattened wire and made to conform

FIG. 1.



Saddle-bridge—typical form (back view).

accurately to the shape of the nose at a definite point of selection, crossing the bridge of the nose at right angles, and so resting saddle-wise upon it—whence its name. (2) A pair of adjustable return-pieces or arms, to the extremities of which are attached the rims or clasps carrying the glasses. These arms are produced by bending outward upon themselves the limbs of the wire from which the arch of the bridge has been formed, and are given whatever special direction may be required to place the glasses in the desired position before the eyes of the individual wearer.

The bridge consists, then, of an arch and two adjustable arms, which, while fixing the glasses in their proper position before the eyes, should furnish as nearly an immovable support as possible.

The bridge of the nose close to its root being the basis of support, the spectacle bridge must be constructed with reference to this part. The wire of which it is made should be wide at the middle and taper toward each end, so as to make the bridge widest

different persons, though on every nose there is one point which should be sought—the *point of selection* termed. Unless the arch be adjusted to this particular wearer will be rendered uncomfortable, and he cannot wear his spectacles. A few days' wear may be required to find this point definitely in a particular case.

The arch of the bridge, when once adapted to the nose, cannot be altered in position during any subsequent regulation which may be required; it is to be considered a fixed support, whose situation is determined, once for all, by the conformation of the wearer's nose. Hence, the position of the lenses is to be taken before the eyes does not directly from the arch, but rather upon the length and direction of the arms attached to it, by variations in which the glasses are made to take any required position. The arms are to be made short, they may be set high or low, pointed inward or outward according to the requirements of any given case.

If the eyes be specially prominent, and the bridge of the nose low, thus causing the lashes to project beyond the level of the eyes, the arms must be made relatively long (Fig. 2); or if

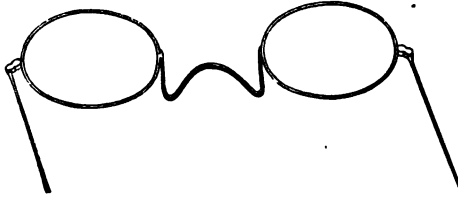
FIG. 2.



the arms should be shortened, or even reduced to the minimum required for purposes of lateral and vertical adjustment.

The height of the eye as related to the part of the nose on which the arch rests—the point of selection—determines the amount of

FIG. 3.



Saddle bridge, with vertical arms for flattened nose; eyes high.

slant, if any to be given to the arms. In practice it is found that in by far the larger proportion of cases the arms are nearly horizontal, slanting slightly upward; in exceptional cases they slant downward below the horizontal; and in rare instances it is necessary to give them an almost perpendicular direction upward. The angle which the arms make with the clamp or rim carrying the glasses must vary according to the direction of the arms, in order to keep the plane of the glasses perpendicular to the visual lines. The arm, where it is soldered to the rim, or the clasp of frameless glasses, is slightly bent in an upward direction. Increasing or diminishing these curves changes the position of the glasses vertically, and so compensates for any degree of upward or downward slant of the arms. This may be necessary where, for example, the point of selection of the arch is low down on the nose; the arms must then ascend vertically to raise the glasses to a level with the eyes; but this position of the arms will cause the glasses to assume an approximately horizontal direction—parallel to the visual lines—if the arms meet the rim at or about a right angle, as they usually do; in such a case, the arm must be bent so as to join the lens at oblique angle or even lie in the plane of the lens.

The proper adjustment of a pair of spectacles in ordinary cases is largely determined, as we have seen, by the length and direction of the arms. In special cases, also, as in asymmetry of the face, the compensation required is to be effected by the same means. In some cases the arms may need to be of unequal length. It is of frequent occurrence that the centres of the pupils on the two sides are unequally distant from the centre of the arch. When this con-

dition exists, it is to be met by varying the direction and, it may be, also the length of the arms.

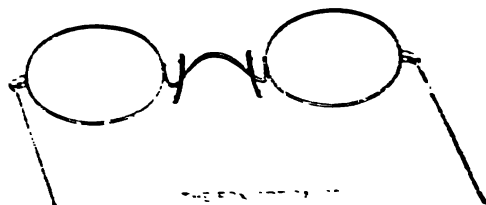
It is important from the point of view of the optician, to note that the principal adaptations of the bridge are preferably to be made extemporaneously and with the patient present. In this way, with a variety of sizes of the typical form at hand, the skilful mechanic is able to produce any particular modification which may be required without specially constructing the frames, even for atypical faces. It is often desirable to take the conformation of the nose at the point of selection. This may conveniently be done with lead wire and the outline thus obtained may—by “rubbing”—be made a part of the record of the case.

Variations in the size of the lenses employed will also necessitate modifications in the lateral adjustment of the arms. To get advantage of a large glass in cases where the distance between the eyes is relatively small, the arms will have to be bent inward—made to approach each other. The opposite direction may have to be given them in cases of unusual width of face.

Lateral supports, or clamps, which take their bearing lengthwise on the sides of the nose near the base, as in eye-glasses of the best construction, have occasionally been employed by others in combination with spectacle-frames, but usually in form and by mechanical means not wholly satisfactory.

I have recently had made by the Fox Optical Company a combination of the eye-glass clamps with the saddle-bridge (Fig. 4), which

FIG. 4.



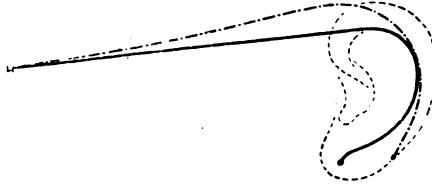
Saddle-bridge with clamps.

is neat and simple in construction, and which combines the advantages of both in great degree. The attachment is so made as to preserve the adjustability both of the bridge and the clamps. The special advantage of this combination is that it *distributes the pressure* over a larger surface, and upon parts better able to sustain it than does the arch of the bridge alone.

The side-pieces, or *temples*, should be *specially adapted* to the ear with as much care as the bridge is to the nose in each individual case. They should be hooked around the ears for constant use and be so formed as to retain the bridge at the point of selection on the nose, and thus secure a fixed position of the entire appliance. The curve of temples, as ordinarily made, is of far too great a radius. It takes its bearing behind the ear upon a limited surface, and so is liable to cut; it fails to secure a proper hold to prevent its riding upward, and it often exerts spring-pressure productive of pain and injurious to ears and nose alike.

An adapted temple, designed to fulfil the above indications and obviate these defects, has recently been constructed under my direction, and has been the test of use so well as to justify its continued regular employment (Fig. 5). The wire of which it is made passes

FIG. 5.



Adapted temple.

back in a straight line to the top of the ear, at which point it is bent somewhat abruptly downward, and is made to conform accurately to the posterior surface of the conch close to its junction with the head, where it rests in contact with the ear, but without perceptible pressure. Asymmetry in the height of the ears, causing *tilting of the frames from the level*, is to be met by a compensating adjustment in the temples, *i. e.*, bending the temple upward on the side of the higher or downward on the side of the lower ear—or both—and so dividing the result between the two sides. The glasses should be slightly inclined from the perpendicular, so as to bring the lower edges somewhat nearer the face than the upper, which is to be effected by giving the temples the appropriate angulation at their junction with the hinges when it is impracticable to change the direction of the hinges themselves.

The material of the frames should usually be gold, of a good quality and of a weight as light as is consistent with strength and steadiness. Steel rusts too readily and is not well adapted to the

adjustments frequently required—more especially in the temples. Silver is so soft as to be almost worthless. The lenses themselves should usually be as large as the face of the wearer permits : seldom less than 28x38 mm. for an adult, and not infrequently as large as 29x40 or 30x42 mm., in order that the eyes may be well covered in their ordinary lateral movements. Such large lenses are hardly more conspicuous than small ones—especially if frameless glasses be used—because they allow the eye itself to be easily seen. The reflections from the edges of frameless glasses which are so annoying to some persons may be avoided by slightly dulling the polish on the lower edge; the source of this reflected light being usually at or above the level of the eyes, the reflection enters the eye from this edge alone.

The glasses should be worn as close to the eyes as possible, without touching the lashes. Occasionally, where the lashes are especially long, with feathery or uneven ends, they should be neatly trimmed with the scissors—a little procedure best practised when the eyes are closed.

It is also to be born in mind that the subject has an artistic aspect and that by giving proper consideration to this phase much can be done to remove the opprobrium which frequently attaches to the wearing of glasses. The neat adjustment of a pair of frameless gold-mounted spectacles is doubtless the best that can be accomplished with spectacles in this respect.

In the above it will be seen I have limited myself to a description of no one form of bridge, nor even of a number of special forms, but the effort has been made rather to demonstrate *the mechanical principles involved in the construction and adaptation of spectacle-frames suitable to all the requirements of practice.* By the means proposed it is practicable to secure the correct position of the glasses before the eyes, together with comfort to the wearer and a satisfactory artistic effect, thus fulfilling the three principal indications of spectacle-mounting.

DISCUSSION.

Dr. EDWARD JACKSON: One of the difficulties I have met with in having opticians fit frames, and in making students understand how frames should fit, is in regard to the location of this "point of selection," to which Dr. Thomas refers. It is not any point arbitrarily chosen, but is, in each case, rigidly determined by the form of the face. To it the traction of the temples constantly tends to bring the bridge.

The bridge placed above it is drawn down, or below it is drawn up toward it and comes to rest upon it.

A point which has recently come to my notice in fitting frames is that the plane of the temples must pass through that part of the surface of the bridge that bears upon the nose. If it passes above or below this it tends to tilt the bridge, so that its edge bears on the nose instead of the flat surface. To effect the proper position it will sometimes be needful to attach the bridge and the joint for the temple, not at opposite extremities of the horizontal diameter of the lens ellipse, but at the extremities of a shorter cord lying above or below this diameter.

Dr. GEORGE M. GOULD : I wish to speak on one point brought up by Dr. Thomas, and that is the reflection from the edge of rimless glasses. I have had patients who could not wear glasses on account of the annoyance caused by this reflection. Last year, in *Knapp's Archives*, I described a little device of my friend Dr. Rhoads, by which the edge of the glass was beveled on a plane with the pupil. In this way all reflection is avoided. The only objection is that this exaggerates the reflection to the beholder.

In reference to the effects of pressure of the bridge on the nose, I had a case last week which brought a new phase of this matter before me. A couple of months ago I applied glasses to a patient with specific rhinitis. Following this, the nose ulcerated near the point of pressure, and several pieces of bone were discharged. I do not think that it was due altogether to misfitting of the frame, but principally to the fact that the skin was so sensitive that the least pressure caused trouble. It, however, gave me a lesson not to apply glasses in specific rhinitis in an acute stage.

The whole of the paper of Dr. Thomas is a corollary to the great fact that the optician should be an educated mechanic. The optician stands in the same relation to the oculist that the druggist stands to the physician. Until the optician learns to take a pride in his profession we shall not have well-fitted glasses, unless we are constantly on the watch. We should, therefore, do all that we can to elevate and encourage the dignity of the optician's profession.

Dr. THOMAS : I am glad to hear the suggestions of Dr. Jackson in regard to the line of draught and the location of the temples. I think that there are cases in which this may make a good deal of difference, and it is a point which hitherto I have not taken into account.

The bridge has had a widely extended use, for a number of years, and the only reason for bringing the subject forward now is that it is not perfectly understood by ophthalmologists and opticians. It is a bridge of wide adaptability, and is capable of being converted into a great variety of special forms, some of which have been here shown.

BUFFALO OBSTETRICAL SOCIETY.

Reported by WM. C. KRAUSS M. D., Secretary.

Regular Meeting, held February 24, 1891.

THE President, Dr. A. H. BRIGGS, in the chair.

The paper of the evening, entitled Varicose Veins, was read by Dr. ALPHONSE DAGENAIS.

In selecting varix and its consequences, I am aware of the difficulties of treating a subject to which authors on diseases of women attach very little importance. They seem to think this subject of not sufficient gravity to give it lengthy discussion. It is my object to confine this dissertation to the consideration of varices of the lower extremities, which are oftener met in general practice, and particularly in the pregnant female. Surgery claims the right almost exclusively of treating the subject, which, "au premier abord," seems to belong to it. But, in its progressive and wonderful march in the path of science, surgery wishes to control everything. Therefore all gynecologists are surgeons, and in so saying we only give another proof of the great affinity existing among other different branches of the medical sciences.

The cases which come under observation (with a few exceptions occurring among men) seem to call for a separate consideration in the diseases of women, and for that very reason I wish to hear the different views entertained by the members of this Society.

Permit me a short anatomical description of the veins. We all know their starting point from minute radioles in the capillaries, which are found everywhere in the textures of the body, that converge to constitute larger and larger branches, till they terminate in the main trunks which convey the venous blood directly to the heart. They are provided with three coats like the arteries, but are thinner, and have more frequent communications between themselves, this being strikingly exhibited in the frequent inosculations of the spinal veins, as well as in the spermatic and vesical plexuses. The benefit of these inosculations is very apparent, preventing to a certain extent the obstructions to which the veins are liable from their inability to overcome much impediment by the force of their current. We know, too, that the blood current is maintained by the slight force, *vis a tergo*, remaining of the contraction of the left ventricle and by muscular pressure.

One reads in Kirke's Physiology, that —

The great obstacle to the upward current of the blood in the veins of the trunks and extremities in the erect position, supposed to be presented by the gravitation of the blood, has no real existence, so long as both arteries and veins contain a continuous column of blood. The force of gravitation, whatever be the position of the body, can have no power to remove or resist the motion of any part of the blood in any direction. The lowest blood-vessels have, of course, to bear the greatest amount of pressure; the pressure on each part being directly proportionate to the height of the column of blood above it, hence their liability to distension. But this pressure bears equally on both arteries and veins, and cannot either move or resist the motion of the fluids they contain, so long as the columns of fluid are of equal height in both and contiguous

I have quoted the above in order to show that external causes must exist to produce varix; for the laws of equilibrium are observed with absolute correctness, in the dispositions of the fluid contained in the blood-vessels.

There are two causes for varix: First, accidental and mechanical, of which pregnancy and confinement are the main factors. Second, a general laxity of the tissues which predisposes to it and in which cases the normal muscular pressure is missing; hence this tendency to enlarge.

Even without mechanical interference in such cases, the coating of the veins themselves must share in this laxity; although absent in younger years, they are developed chiefly during the active middle period of life; still their appearance may be postponed until old age. Obstruction to the circulation is, we know, the passive cause of their formation; it is the reason why they coincide with certain diseases of the heart, lungs, or liver, because such a circulation of the blood suffering from such a disease is easily influenced, and this influence is more prevalent upon the veins of the legs, because the pressure of the column of blood which these vessels have to resist is increased by gravitation. So, if there is a tendency to dilatation by obstruction, such force, instead of moving the blood column, is expended upon the vein walls. In persons with relaxed and debilitated veins, large varices will sometimes appear suddenly after violent muscular exercise.

The anatomical changes in varicose veins have been described by Andral, who says that the vessels may become thickened or thinned; they may also become lengthened, so that the veins are rendered tortuous; that the dilatation may be unequal; that varix of the femoral vein, which requires to be distinguished from a

femoral hernia, is formed by the yielding of the vessel at its junction with the internal circumflex, saphena and profunda veins. The valves of the veins are not destroyed by the backward pressure of the column of the blood, but they are flattened against the vein walls and often shrink and become atrophied. The tissues surrounding the diseased veins become gradually absorbed as a result of the continued pressure of the varix, and in cases of long standing we often find the surrounding tissue thickened and hard from simple edema.

More care should be given to the first symptoms of this troublesome malady. When a patient first applies for relief, instructions must be given as to the importance of care, and warning should be served of the ultimate liability to the formation of varicose ulcers. But patients seldom have the inclination or the opportunity to submit to rigid treatment for the cure of a disease which causes comparatively little inconvenience, and when this is the case simple compression of the distended veins will often give great relief and even prevent the disease from growing worse. It is useless for me to describe the symptoms of varix with which all are familiar. Suffice it to mention that statistics obtained by Verneil at the Hôtel Dieu, show that one limb is diseased just as often as the other—in fact, the cases are rare in which the disorder does not affect both limbs simultaneously. The best authorities, says Holmes, admit that the treatment of varices of long standing are inveterate, for although much good may be done for their relief they cannot be cured.

But I think if more care was taken of the general health better results would be obtained. The feeble and ill-nourished patient must be invigorated by tonics and a generous diet. The plethoric with an embarrassed portal circulation will be benefited by repeated doses of purgative medicine and saline baths; some special symptoms demand special care. When there exists an acquired laxity of the veins, tinct. hamamelis, ergot, and above all tinct. ferri mur. give good results; it is also advisable that the legs should be rested in the horizontal or elevated position, and the limb thus rested should be bandaged from the toes to the knee. The pressure should be firm and equal and the bandage renewed daily. At the time of the renewal of the bandage, rubbing with the hand should be advised, for at least a quarter of an hour, as, by this treatment, the circulation through the subcutaneous veins is rendered brisk and the tonicity of the walls reestablished. With this rest of the muscles, the improved tone of the superficial

vessels, and the improvement of the general health, a good result may be anticipated. As to bandages, the elastic spiral bandage or the elastic webb stocking are the most convenient and afford the necessary support; they should be removed at night and replaced in the morning.

The most difficult to manage are old varices surrounded by a quantity of indurated tissue, which protects them from ordinary pressure. Harapath suggests the division of the fascia lata at the saphenous opening to relieve the pressure on the femoral veins. Of the different operations suggested, objections have been made to the peril to the patient's life from diffuse inflammation extending along the course of the vein which had been operated on ; but cases for operation must be selected with care. Celsus draws a distinction between straight and convoluted varices ; for the first, he recommends that they should be exposed by cutting through the skin and then destroyed by actual cautery ; while for the latter he would advise they be at once cut out with the knife. Ambrose Paré and Petit punctured them, squeezed out their contents and applied a bandage. Bayer tied the vein above and below before cutting ; and Holmes, after dividing the skin, passed a thread under the vein and so tied the vessel leading from the varix towards the heart, under the impression that the blood, as it could no longer flow through the vessel leading from the varix, would stagnate and then coagulate. Capaletti employed galvano-puncture to induce coagulation of the blood in the varix.

The treatment today is the action of caustics applied over the course of the vessel; the subcutaneous division of the walls; or, by compressing it between a steel pin and a twisted suture. Brodie recommends that enough caustic should be used to insure the sloughing of the vessel, as a more certain mode of securing its destruction.

VARICOSE ULCERS.

The varices in their constant work of interference by impeding the return of the blood, and by constantly producing habitual congestion, are rendered prone to ulceration, which gave rise to varicose ulcers and to the eczematous appearance of the surrounding surfaces. The ulcer generally appears to be deep, but it is only due to great amount of pain they produce. There are usually three or four in progress at one time, generally situated above the ankle or along the track of " " " oval in shape, indolent in their progress, and " " " are painful at

first. I have a patient now who complains if any of her family walk near the bed. She says the pain is so intense that she never expects to get better. This case is a good illustration of the ordinary manifestations of the disease. She had been troubled with varicose veins when pregnant, years ago, but she said they had all disappeared, and for years she never expected further trouble: when, all at once, a simple red spot appeared on her leg, which, in a few days had become an abscess. This was soon followed by three others going through the same process. She had to be kept under the influence of opiates for the first few days: the local application of boracic acid was then discontinued, and I substituted a solution of cocaine and applied iodoform, iodol, and warm fomentations. Tr. ferri mur. is taken regularly and she now seems in a fair way to recover.

I mention this first case to illustrate the primary condition of varicose ulcers. But there is another form which I may call chronic, or recurrent, or of long standing, where the skin of the lower extremities seems to be permanently discolored, whether the varicose ulcer is present or not, and which is accompanied sometimes by venous hemorrhages or by ulcer. These are not so painful generally, but obstinate to the treatment. I wish to describe two cases of this type.

CASE I.—Mrs. H. — came under observation with the condition reported above. He had been going the rounds of the physician's office many cases of this class which was somewhat peculiar on several of his visits. Nothing seems to change the appearance of the ulcerated surface—lead preparation, iodoform, boracic acid, and all caustics would irritate the surface without bringing any change. I used a mixture of Fowler's sol. and tinct. of iron, and by still exposing the ulceration. I took up minute pieces of skin from the ulcer and grafted the same—100 grafts at the first sitting only—used the absorbent cotton with iodoform and bandage to retain them in position. In a few days to my surprise there were signs of vitality. The same process was repeated three times in succession, and in a short time the ulcer had completely healed.

CASE II.—Mrs. S. — came under my observation with the same history and the same symptoms, but one of the borders of the ulcer was more advanced than the other, the sections of a greenish appearance and it often bled. I first poured carbolic acid washes—iodol and iodoform—on the same mixture inwardly and in a few weeks had no more to do with the ulcer. I tried grafting: but instead of improvement, it irritated the ulcer so that I dared not repeat it. At

last resort I prescribed protoiodide of mercury, gr. one-sixth, twice a day, and gr. xx. of iod. potassium. Under this plan I had the pleasure of seeing a marked improvement, and it told its own story.

473 VIRGINIA STREET.

DISCUSSION.

Dr. THOS. LOTHROP : In treating varicose veins, I always tie off the vein and get good results. In varicose ulcers the results are unfavorable, as they occur in old, broken-down multiparous women. In such, I generally use the elastic bandage or rubber stocking.

Dr. E. CLARK : In treating this affection I elevate the limb, strap the edges of the ulcer, and cauterize. New granulations will be set up in a short time.

Dr. A. E. PERSONS : To heal a varicose ulcer, we must support the venous circulation. I generally use the adhesive straps ; they equalize the circulation and stimulate granulations. Afterward the flannel bandage is employed.

Dr. DORR : When the patient coöperates, I generally get good results. Wash the ulcer with campho-phenique and carbolic acid, one dram each to one pint of water. I think the flannel bandage is superior to the rubber stocking.

Dr. FELL : In all these cases there is some devitalization of tissue, and we must overcome this obstacle. I believe that gravity has much to do with the formation of these ulcers.

Dr. BRIGGS : When I was a student, the injection of iodine was in vogue. I have had as many as twenty patients with varicose ulcers under treatment at the same time. I have always had them in old multiparous women of German birth. My treatment is as follows : I bandage the limb with flannel cut on the bias, and place a piece of linen soaked in carbolic acid over the ulcer. Calvert's carbolic acid I believe is almost a specific for this trouble. I generally use two ounces of the acid to two pints of the water.

Dr. E. A. SMITH : I have seen large sized veins in a young man and believe hereditary weakness plays an important rôle.

Dr. MYNTER's treatment is as follows : He freshens the edges, and applies skin grafts. Then places the limb in plaster. In severe cases he dissects out the veins.

"MEDICAL science has made such a progress," said the doctor, when speaking of his profession, "that it is impossible for anybody to be buried alive now." Then he wondered why everybody laughed.—*Boston Courier*.

Clinical Report.

MENTHOL IN THE LOCAL TREATMENT OF ERYSIPELAS.

By A. L. BENEDICT, M. D., Buffalo, N. Y.

G—, a man of middle age, had his first attack of erysipelas eighteen years ago, when the head and face were affected. Six years later the right foot was involved. In 1887 two attacks occurred in the left ankle and foot, there being a period of a week or two between the attacks. In the Spring of 1889, the right foot was again the seat of the disease with considerable lymphangitis along the course of the internal saphenous vein. This attack was treated locally with naphthalin ointment and it lasted eight days from the initial chill to the defervescence, the highest temperature observed being 104.8 on the fifth day. Eight to ten days was the duration of all the attacks which the patient had experienced, and all of them were of moderate severity.

On February 10, 1891, at 10 A. M., the patient was seized with a chill. He walked home, about a mile, and went to bed. Ordinary domestic remedies and diffusible stimulants were employed but the chilly sensations did not disappear for nearly two hours. Beside the sensation of cold there was violent retching but without emesis. The temperature record is as follows:

Feb. 10, 1 P. M.	101.2	Feb. 12, 9 A. M.	101.2
Feb. 10, 7 "	102.8	Feb. 12, 2 P. M.	101.4
Feb. 11, 9 A. M.	102	Feb. 12, 10 P. M.	101.5
" " 4 P. M., acetanilid.	104	Feb. 13, 9 A. M.	99
" " 6 " "	103.8	Feb. 13, 10 P. M.	99.5
" " 10 "	103	Feb. 14, 9 A. M.	99.7

Partly on account of the writer's lack of faith in internal medication in erysipelas, partly on account of the chronic lithemic condition of the patient and the irritability of his stomach, the treatment was limited, with the exception of a few doses of acetanilid and some other symptomatic treatment, to the local application of a fifteen per cent. solution of menthol in liquid petrolatum. The writer has never heard of such a use of menthol; he was led to try it from its known physiological action and from some practical experience with it in the treatment of conditions of the respiratory apparatus. Most of the essential oils contain some principle which is anesthetic and antiseptic—actions which are manifestly called for in the local treatment of erysipelas and, therefore, it would not be surprising to learn that others have used menthol in this disease.

After the first thirty-six hours a marked diminution in the rash was noticed, corresponding to the decline of temperature. On February 14th, a small bleb was opened on the great toe, and on the next day no trace of disease remained, except the thickened skin of the foot and an ecchymosis on the great toe, bearing testimony to the original severity of the disease. On the evening of February 15th, the foot was washed with a warm solution of mercuric chloride (1:4000), and for several days the patient was convalescent. Late in the evening of February 20th, the patient had another chill, which proved to be the beginning of another attack of erysipelas, almost identical in its local lesion, temperature, and symptoms with that just described. The menthol treatment was resumed, and the attack had subsided by February 26th.

As far as this case is concerned, the theoretical considerations that led to the adoption of the menthol treatment were supported by the practical result. The patient had never had so speedy recovery under other treatment, and he declared that the usual discomfort and pain attending the attacks were almost entirely relieved by the menthol. The patient's family expressed a decided preference for the odor of menthol as compared with that of naphthalin. The second attack—and that it was a second attack and not a recrudescence is plain when we consider the five days of normal temperature and the lack of either local or constitutional symptoms—is easily explained. Owing to a disturbance in the domestic economy, the patient's room was at the time the only one in which he could be made comfortable, and thorough disinfection of the room while he was in it was impossible. In some way, perhaps on account of the tenderness of the skin of the foot, possibly—though the patient will not admit this—through some minute abrasion, produced by picking off the dead cuticle, germs entered from the air of the room and produced the second attack.

The writer does not wish to be included among that deplorably large class of physicians who rush to brilliant generalization from one or two apparently satisfactory results. One swallow does not make a summer, and one case does not establish the efficacy of a drug. This case is reported for the sake of inviting others to add their testimony, and, according to the favorable or unfavorable evidence of a considerable number of cases, let the new treatment be judged.

Progress in Medical Science.

NERVOUS DISEASES.

Conducted by JAMES W. PUTNAM, M. D.

PITTS (*University Medical Magazine*) has added to the list of cases of Pressure Paralysis the following case of palsy of the deltoid muscle, caused by pressure upon the circumflex nerve. This is the only case of the kind in literature. The history is briefly as follows :

T. T., aged 40, single, and a blacksmith by occupation, came to the Nervous Dispensary complaining that four weeks before, after drinking heavily all day, he went to bed and on awakening the following morning found that "he could not lift his left arm above his head."

On examination it was found that the patient could elevate the arm only to a very slight degree in any direction. All other movements could be performed without difficulty. The deltoid was flabby and reactions of degeneration were present. There was no pain and no tenderness on pressure over any of the nerve trunks ; sensation was not affected.

Under the use of strychnia and galvanism he made a good recovery in a few weeks.

As to the cause of this palsy, it is probable that he laid upon his back so close to the side of the bed that the edge of the sideboard exerted continuous pressure upon the circumflex nerve where it winds posteriorly around the neck of the humerus.

IS CHOLERA A NEUROSIS ?

CHOLERA is ever an interesting disease, and the theory laid down by Alex. Hackin, F. R. C. S., that it is a neurosis, whatever its origin may be, has led him to adopt an entirely new treatment which is ably sustained in the *Medical Age*. He believes all the phenomena to be due to the troubles produced in the functions manifested in the sympathetic system. He says the vomiting and the numerous stools evidently are connected with the attack upon the nervous apparatus of the stomach and the intestines: the choleric crisis, the cramps, the vertigo, the anxiety, the spasms, the tremblings, have a nervous origin. It is to the vaso-motors, then, that we must refer the depression of the functions of respiration and circulation, the gravest symptoms in cholera.

With this idea he treated cases of English cholera by using the antagonism of the pneumogastric nerves as the means of checking the action of the sympathetic nerves. In every case, he observed that by stimulating the pneumogastric in the neck, or by developing the inhalitory power, the vomiting, the stools, and the cramps were arrested. The simplicity of the treatment at once attracts us. In all cases of cholera, whatever the stage, he applies with a brush the epispastic liquor of the B. P. on the branches of the pneumogastric in the neck, or the mastoids, or under the eye, covering about three inches of surface. The effect is generally instantaneous.

As an illustration we will quote a case reported by Dr. Cannatacci, at the hospital at Zeitum. He says the treatment of Dr. Hackin is the most useful in asiatic cholera.

At half-past eight I was called to see policeman Banack. When I arrived I found the following phenomena :

Vomiting, feeble pulse, violent cramps, palpitation of the heart, great debility, coldness of the extremities, numerous rice like stools. He told me that on arriving at the barracks he had been seized with profuse vomiting, then, after the lapse of a half hour, with numerous stools and cramps.

The attacks succeeded each other every quarter hour. I administered no medicine, but applied the epispastic liquor under both eyes, assuring him that none of his symptoms would return. I saw him at half-past ten ; he was convalescing, and had had no more passages or attacks of vomiting.

THE TREATMENT OF EPILEPSY.

THE treatment of epilepsy being so unsatisfactory, it continues to invite new therapeutic measures. Among recent suggestions we notice in the *Journal of the American Medical Association*, that bromide of gold has been employed in Russia, Germany and Belgium, as a nervine and anti-epileptic. Dr. Goubart, of Brussels, has reported that, in a certain proportion of cases, it has been better borne than any of the bromides. According to him, the initial dose for adults should be one-eighth of a grain, to be increased gradually to one-fifth ; for children, from one-twentieth to one-tenth of a grain. The drug is a yellowish gray friable mass, *insoluble in water*. Dr. Pott's reports results of treatment suggested by Dr. H. C. Wood, of Philadelphia, some years ago : " In all cases when antipyrin and bromide of ammonium were used, there was marked relief of the symptoms, and in some cases when other remedies had

failed to give relief. There were no indications of bromism and none of the unfavorable symptoms of antipyrin observed. Six grains of antipyrin were usually given *with twenty of the bromide*.

NERVE-GRAFTING.

IN THE *Review of Insanity and Nervous Diseases*, we find that Atkinson reports a number of successful cases of nerve-grafting to the British Medical Association, September 13th. It is important to bear in mind that the substitution of a new piece of nerve for a piece that has been lost (nerve-grafting) is a totally different thing from the uniting of a nerve (nerve-suturing). In one case the median nerve had been divided in an operation. Two and one-half inches of the tibial nerve from an arm that happened to be amputated at the same time, was transplanted to the forearm of his patient. Healing occurred by first intention, and sensation began to return in thirty-six hours, and in five weeks was complete. The muscles partly recovered their power. A number of other cases were reported with similar results. Strict asepsis is important, though union may occur following suppuration. Return of sensation occurs before motion. Better results are obtained when the grafting is performed *immediately after the injury*.

RECENT LEGISLATION FOR THE INSANE IN THE STATE OF NEW YORK. DR. CARLOS F. MACDONALD, the President of the State Commission in Lunacy, recently read a paper with the above title in New York City, in which he states that for all this class of dependants, a more enlightened and humane system of treatment and care will be secured, and greater protection will be afforded against possible abuse and wrong, in their commitment, custody and control. The legislation referred to embraces the following :

- 1st. Providing for extension of State hospital accommodations.
- 2d. Creation of a State Commission in Lunacy.
- 3d. Providing for a removal of the insane from county poor-houses to State hospitals.
- 4th. Changing the corporate title of the respective State institutions for the insane, to that of State hospitals, thus recognizing and establishing the hospital idea.
- 5th. Providing for the employment of a female physician at each State hospital, as an adjunct to the regular medical staff.

The creation of the State Commission in Lunacy was to provide for an independent governmental supervision of the insane, and of all

institutions devoted to their custody. He proceeds then, in detail, to explain the twenty-one sections of the act, from which he concludes that the supervisory and correctional powers of the Commission, as regards the insane and the management of institutions, are practically unlimited. He reviews the work of the Commission for the last eighteen months, and demonstrates, very clearly, that the Commission has already done much for the improvement of this unfortunate class.

A NOVEL experiment is about to be tried in the treatment of insomnia, in the department for men in the State Hospital for Insane of the south-east district of Pennsylvania. Dr. Chase says he is about to begin a series of experiments in the treatment of insanity in rhythmic sound, based on the principle involved in the treatment of nervous diseases, with rhythmic flashes of light. The basis on which he proposes to experiment, includes those suffering from insomnia. He will use a mechanism similar to an electric drum, when rhythmic vibrations can be completely controlled both in velocity and pitch. He believes that a pleasant sound, by the means suggested, pitched just above the irregular sonoric disturbances of turning in bed, coughing, snoring, sighing, etc., of a dormitory or ward, might be attended with beneficial results; or happily administered in individual cases.

The novelty of the method strikes us, but we cannot say that it commends itself at first glance.

SURGERY.

Conducted by JOHN PARMENTER, M. D.

SCHMELTZ (*Gaz. Méd. de Strashbourg*, 1890, No. 7,) relates a case in which he amputated a breast during hypnotic anesthesia. The patient was twenty years of age, and suffered from a sarcoma of the right breast. From the beginning to the end, the operation was conducted as ordinarily; the face was very pale; the pulse showed scarcely any disturbance; union by first intention. Recovery in fourteen days. The parents had told the patient the hour of the operation, in consequence of which, on this day, complete anesthesia could not be obtained, hypnosis having been easily induced previously. The operation was, therefore, postponed until the following day, the patient having been informed that it would

not take place for eight days. She was then hypnotized and the operation proceeded with.

WAGNER (*Centralblatt f. Chirurg.*, 1891, No. 2,) describes two cases in which he has used his method of "temporary resection of the cranium," first described in No. 47 of the above for 1889. Both cases, given somewhat in detail, demonstrate that the operation is very easy to do, and that the resected piece reunites both quickly and without reaction. In both instances the part resected was about one-fifth of the entire cranial vault, which leads the author to believe that a still greater amount will heal in the same way, and he would not fear to resect two-fifths or more if necessary. Naturally the isthmus of the flap must be correspondingly broader. Just as we have trephined, sometimes, the skull in different places, so we can make this temporary resection in one or more places. First, corresponding to the piece of bone to be removed, a curved incision is made whose ends converge toward each other. This flap must overlap the bone to be raised one-fifth to two-fifths of an inch. The soft parts retract, and the incision gapes in a sickle-shaped way, with the point toward the base of the flap. The flap is now firmly pressed upon the cranial surface, and the pericranium smoothly cut through along its border. With a small, fine chisel a little trough is made in the bone along the line of the incision. For the further steps of the operation, a moderately thick but small chisel, abruptly beveled on one side, is used. This is applied in an oblique manner. One can work his way through the cranium most quickly with this. When all the bone is chiselled through, a small, thin chisel is used to cut through that part of the bone covered by the isthmus of the flap. The skin and bone are now raised together with the aid of a small elevator. The replacing later on is very easy to effect. When the chisel is applied obliquely, the inner circumference is naturally less than the outer. The soft parts are then sewed together with fine sutures, and one of the under angles of the wound left open. The suture line does not correspond with the bony defect, but is somewhat removed from it, the soft parts overlapping this, in accordance with the plan of the incision above mentioned. In this way an adherent scar between bone and skin is avoided.

Regarding the indications for "temporary resection," or "osteoplastic trepanation," the author regards it, in general, indicated wherever in not injured bone the cranial vault is to be opened, not

only in cases where we expect with certainty or probability to find removable alterations, but where we only suspect them; for instance, many cases of epilepsy of doubtful traumatic origin. This form of exploratory opening of the cranium the author regards fully as justifiable and no more dangerous than exploratory laparotomy.

C. L. DANA (*Post-Graduate*, January, 1891,) gives a new method of determining the position of the fissure of Rolando. It is this : Find and mark the stephanion, *i. e.*, the point where the temporal ridge crosses the coronal suture. Find and mark the concave depression just above and behind the tip of the mastoid, and just below the asterion or junction of the lambdoid and temporo-parietal sutures. Draw a line between these points. Find the bregmia, and draw a line from it to the posterior edge of the external auditory meatus. *The point of crossing will be just over the lower end of the fissure of Rolando or within a centimetre of it.*

WYETH (*Medical Record*, February 21, 1891,) describes a case of craniectomy for microcephalus. The history of the case is as follows :

Male child born at term, February 2, 1890. Normal labor, without deformity ; weighed nearly six pounds; at four weeks of age the anterior fontanelle closed. At the third month child had whooping cough, became nervous, screamed as if in pain, and was extremely wakeful. In July chloral and morphia were given. September 27th, child had a cataleptic attack which lasted one and one-half hours, it remaining "as if dead" during this interval. Following this attack talipes equino-varus was noted, the left foot being most affected. The left hand was also somewhat flexed. November 21st child much improved, opiates discontinued and improvement in flesh and weight. No expansion, however, of cranium. January 1st, child came under Dr. Wyeth's care, looking fat and rosy. Cranium about as large as that of a child two months old and sharp pointed. Eyes moved convulsively at times, pupils dilated; did not seem to appreciate things about it. Hands and arms did not move coördinately to grasp things offered, but were chiefly engaged in jerky movements toward mouth. The various portions of the body, feet excepted, seemed normal. Operation January 7, 1891, chloroform, head shaved, antiseptic details. Incision in median line from near base of nose to just beyond occipital protuberance. Pericranium pulled aside to expose skull for about one inch on either side of median line ; cranial bones firmly ossified. No interosseous cartilage observed. Small trephine applied, and two trenches made with rongeur, one-quarter inch

and extending from just above the eyes to the occipital protuberance leaving a bridge three-fourths of an inch wide to protect the sinuses occipitalis in its entire length. At either end two trenches ran then antero-laterally one inch and the parietal bones divided with two trenches one inch and a half in the middle of the top of the head in direction toward the ear on either side. Four fingers were inserted beneath each half of the exposed skull bones and they were torn out from the dura mater. This widened the trenches to one inch each. Dura not opened. Catgut ligatures, catgut wisps between skull and dura for drainage. Time one hour and thirty minutes. Wound closed on tenth day: union by first intention. Improvement followed from first. One month after operation the deformities in the extremities entirely disappeared and there was evidently a marked increase in intelligence. It noticed those about it took hold of objects offered: laughed and behaved like a child of six or eight months. Pupils normal and child otherwise greatly improved.

HARSTER: *Bulletin of the Johns Hopkins Hospital*, Vol. II., No. V. gives here the substance of a demonstration of intestinal anastomosis, made before the Johns Hopkins' Hospital Medical Society. Three dogs, killed after an operation for intestinal anastomosis, showed in two instances no adhesions: in the other, a delicate adhesion at one spot between omentum and line of suture. The writer says: "The success of any form of intestinal suture is inversely proportionate to the extent of the adhesions which result from the employment of the particular methods." His method is new, and depends for its success upon the appreciation of the importance of the submucous coat of the intestine. Inasmuch as the existence of this coat seems to have been ignored, the writer was led to make experiments, of which this demonstration was a result. He then explained the nature of this coat, showed its strength, and how to recognize it by the increased resistance which it offers to the needle, showing at the same time how feeble is the hold which the suture has when it includes only serous and muscular coats of the intestine. For performing intestinal suture of any kind, the following statements are emphasized:

1. It is bad surgery to employ a stitch which enters the lumen of the intestine.
2. It is impossible to suture the serosa alone.
3. It is impossible to suture unfailingly the serosa and muscularis alone, unless one is familiar with the resistance offered to the needle by the coats of the intestine. Furthermore, stitches which

include nothing but these two coats, tear out easily, and are, therefore, not to be trusted.

4. Each stitch should include a bit of the submucosa; a thread of this coat is much stronger than a shred of the entire thickness of the serosa and muscularis. It is not difficult to familiarize one's self with the resistance furnished by the submucosa, and it is quite as easy to include a bit of this coat in each stitch as to suture the serosa and the muscularis alone.

5. As many as possible of the stitches should be taken, and of these as many as convenient should be tied before the intestine is opened.

6. The quilt or square stitches are to be preferred to the Lembert's stitches, because one row of them (the former) is sufficient, and because they tear out less easily and constrict the tissues less than do the Lembert's stitches. Madelung's cartilage plates for circular suture of the intestine are superfluous when the square stitches are used, and when a bit of the submucosa is taken up with each stitch.

He then follows with a description of his method of putting in the sutures, which, however, requires the aid of his diagrams to make it easily comprehensible to any but a surgeon familiar with this kind of work. He claims for his method the following advantages :

1. None of the stitches perforate the intestinal wall.
2. All of the stitches are applied and more than half of them are tied before the intestine is opened.
3. The square stitches are employed.

A paragraph or two upon the preparation and preservation of the needles concludes an article well worth the perusal of the surgeon.

Selection.

GLUTEN AS A FOOD.

BY C. P. PENGRA, M. D.,

Professor of Materia Medica and Botany, Massachusetts College of Pharmacy.

How little we realize the importance of the foods of our day! Count them and we find that we really have but one kind. Man lives on the vegetable kingdom. True enough, we eat, digest, and assimilate beef, pork, mutton, eggs, and a number more animal

structures. But are they anything more than modified forms of vegetable life? Could any of them exist without the latter? The word *structures* has been used simply because it expresses the fundamental idea that the animal, man, dependent and living upon the vegetable, is nothing more than a rearrangement of the products of vegetable life. Yes, he modifies them, but he receives, and is glad to accept, and can also live upon the direct products of the plants.

Therefore, our inventory of our stock of foods brings us to the products of the soil alone, and we find that our actual supply of food is very limited. In fact, the problem of economic and scientific ages has been and is: "Where is the future food to come from?" Already it has been estimated that a natural soil will inevitably become exhausted in 250 years. Need we follow this line of thought further to lead us to the fact that, if the soil supplies all our wants, it probably produces our necessities? If it produces the necessities of our physiological life, does it not likewise provide for our pathological conditions? Admitting this, does it not follow that different products have different purposes, and that in special modifications of the animal system special products of the vegetable are in demand?

Accordingly, it seems reasonable to presume that, for its purpose, the purer the product of the soil the more applicable, useful, and direct must be its action. These points have been advanced not only to call attention to the inestimable value of every true food in nature, but also to the idea that as there must be a purpose and place in the animal economy for each and every food, so also must there be demands for the individual constituents of these foods.

The leading physiologists and physicians of today are clamoring, not for medicines or new chemical combinations, but for nature, dietetics, and proper food. Knowing as we do the importance of this subject, we welcome any addition to our bill of fare that brings evidence of its characteristics and value.

For centuries it has been known that man could live happily upon cereals alone, and it required but little thought to suspect that these very cereals, grain or flour, contained something that substituted the flesh diet of others.

In course of time chemistry developed technically what theory and reason had long supposed, that man obtained from cereals more or less of two kinds of food—a non-nitrogenous (also called starchy, or carbohydrate) and a nitrogenous (meaty or albuminous).

Later—in fact, only about forty years ago—we were told that one of the greatest constituents of our vegetable food was gluten. Analysis showed that nature's store of this substance represented from 12 to even 20 per cent. of wheat, 12.6 of oats, 7 of barley, 6 of rice—in fact, that gluten, or some similar nitrogen equivalent, as legumin, vegetable fibrin, etc., is liberally distributed throughout our vegetable diet.

The physiologists promptly applied this discovery, and we were soon made aware that gluten was one of nature's best means of supplying to man the very elements and effects that he sought for and received from the albuminoids, or meats.

They tell us that it is the vegetable food that furnishes stimulation as well as heat, force, and energy to the system. Furthermore, as deductions from these principles, they prove to us that this gluten, the nitrogenous food of the vegetable world, must inevitably be one of the greatest of foods that are the fuel for all motion, as also chemical action in animal bodies. It is unnecessary to specify proofs of the necessity of nitrogenous food.

The facts that every contraction of a muscle, beat of heart, expansion of lung, secretion and function of digestive fluids, conductivity of nerves, the processes of inflammation, yes, the very vitality of every part of our living bodies, all require and use nitrogen—these are sufficient proofs of the value and need of the best and purest combination of this food element that nature can produce.

As stated above, these properties and values have been greatly accredited to gluten for many years. "The gluten of wheat," "the gluten of oats," "of corn," etc., have become familiar expressions. Likewise, the uses of gluten have been specified and its successful applications as a food have long since been pointed out.

No argument that we have seen has failed to direct attention to the fact that its greatest value for its purposes—"food for infants," "diabetics," "nervous debility," and the like—has depended on its "freedom from starch," the point being that in this condition it offered one of nature's simplest and purest forms of nitrogenous food. But what have been the facts?

One of the leading chemists (Ritthausen) has written: "Gluten is composed of and twelve to sixteen per cent. of starch"—certainly a strange chemical statement, but it nevertheless is an illustration of the explanation of the unsatisfactory results of many "glutens" of the market.

Naturally the great explanation has been in the treatment of diabetics, but even these unfortunates have had to labor under a disadvantage, for recent analyses have shown that there was not a "diabetic food" in the market that did not contain *above* thirty per cent. of starch—in fact, so much of it that Dr. Harrington (chemist, Harvard,) suggests that ordinary biscuits would be quite as good for this purpose.

Considering these claims for its value and usefulness, we have reason to be thankful that so pure and simple a gluten as *Poluboskos* has been placed upon the market. We recognize *Poluboskos* as simply what it is claimed to be, "a pure gluten." No better proof of its purity could be given than the analysis by Dr. Davenport, which shows that nearly four-tenths of one per cent. of it is starch. A chemist's word gives us a technical story, and also a basis from which we may work out physiological actions and facts.

The lines of use and application of gluten as a food have long been well established, and the following observations and experiences are corroborative of them. In other words, gluten—*Poluboskos*—is one of the few instances where practice is the greatest proof of theory.

We have all learned that the composition of our first food, the mother's, is largely nitrogenous matter; that the egg from which the young chick is developed contains abundance of this material, but merely a trace of carbohydrates; in fact, the laws of nature provide the beginnings of life with foods that produce muscle and strength rather than fat.

It is well known that prior to the third month of life the saliva does not contain ptyaline, the very essential agent that in later life starts the digestion of starchy foods.

Considering these two great evidences, do we need more proof to convince us that if infants needed a starchy diet it would not have been so decidedly opposed by nature? No; the too frequent blunder of "kind friends" in stuffing starchy concoctions down the helpless infant throat has been sufficiently discovered and abolished by the physicians of our day, and most of them are prepared to interdict all carbohydrate foods, or at least see to it that these constituents be so modified so as to correspond to the small amount of lactine that is found in the mother's milk.

These are among the leading reasons that have induced the theory that infants in need should be supplied with a nitrogenous rather than a starchy or even mixed diet. These are facts that have

led physicians and mothers to long for something to supply the frequent deficiency of nature. That nature could relieve this want has been believed, and experience is abundant to prove this to be true. Such is theory. But what is practice?

The writer's observation and experience with the Crystal Springs pure gluten food, "Poluboskos," has certainly conformed to the foregoing and all accepted theories on the subject of nitrogenous foods. He has seen infants, weak and apparently exhausted from lack of food, stimulated and almost revived by its use. Where other foods have been rejected by the stomach, this (although dissolved in the same kind of milk that has previously been rejected) is easily retained.

No word of objection or criticism has come to him, and his experience thus far, and that of other physicians and friends, leads to the belief that in this product we have the nearest approach to a natural food for the waning energies of infants and their many ailments of digestion.

Again, older patients continually report its value and relief in cases of weak stomach, dyspepsia, anorexia, etc. Here, again, theory is sustained, for, regardless of its renovating and tonic effects, it is exceedingly easy of digestion. Observation has shown that this very ease of digestion has been the cause of its retention where other foods have been vomited. Of the many people that we have heard say, "O, I can't take milk; I either throw it up or it makes me bilious," I have not known an exception to the report that they are surprised that they can take so much milk with it and feel so well afterwards. Certainly this is good proof of the well-established theory that "the gluten of vegetables is one of the most rapidly digestible of our foods," and makes its use in stomach disorders correspond in reason to the results of experience.

The use of nitrogenous diet for diabetes is so familiar that its desirability does not even require a physician's recommendation. It is well known. The people know it, while the sufferers from this disease very early become accustomed to directing their own diet. What has this been? Almost anything in the market. Even they have almost invariably applied for "gluten, gluten!" But what have they obtained? Many of them in their ambitious determination, having failed to procure their necessary food in this country, have resorted to importation for many years. And with what result? The best and purest obtainable contained from twelve to thirty per cent. of starch. Therefore, it is not strange

that these people and their advisers have been glad, as the writer knows, to find that their own country and kind are capable of supplying their demands with a purer gluten than they had ever before known.

The writer realizes the frankness of these strong claims, but he also knows that he is dealing with a natural food that makes no claim of secrecy, and is as free to the reader in all its claims as is the beefsteak of the market; yet, while approving its claims, he would go further, and say that, besides its usefulness in infant digestion and diabetic disorders, one of its greatest features will be found in the treatment of nervous diseases.

The theory for this use is very evident. If a food can furnish energy and stimulate force production in the system, how can it do it but by toning up and strengthening the nerves themselves? What, then, must pure gluten be, if it is not one of nature's best nerve tonics?

To prove this, the writer has used Poluboskos in migraine, insomnia (due to nervous debility), in incontinence, and especially in spermatorrhea, with results that give evidence that it is a nerve food, and that this nitrogenous, vegetable product has a place in the human economy that is not afforded to anything else within our knowledge.

It is not necessary to enter into a comparison of the various foods of the market, because we know of no other preparation, product, or compound, that offers us ninety-one per cent. of nitrogenous food equivalent.

There seems to be every reason to believe that in Poluboskos we are possessed of one of nature's greatest secrets, and that its future place among the desirable foods of the table will be only another practical proof of its necessity in the feeding of diseased vitality.—*Journal of Balneology and Dietary*, February, 1891.

Correspondence.

BERLIN LETTER.

Letter from Prof. Pohlman—The Twentieth Congress of German Surgeons—Opinions of Von Bergman, Schede, Liebreich, and others—Guajacol, Cantharidis, and Iodoform in Tuberculosis.

THE Twentieth Congress of Surgeons opened its meeting here on April 1st. After a careful and deliberate review, the Executive Committee determined upon a discussion of that all-absorbing

topic, Koch's lymph, for the first day of its meeting, and the following is a short *résumé* of it :

The President, Prof. Von Bergman, Berlin, stated that the characteristic local re-action following the injection of tuberculine occurs only in tubercular cases, but the general re-action has been observed in cases of aktinomykosis and in large soft sarcomæ. In the latter, the possibility that the patients were also suffering from some tubercular trouble was by no means excluded, and careful post-mortems should always be made to determine the exact conditions. It is well known that patients suffering with local tubercular lesions, when subjected to severe surgical operations occasionally develop all the symptoms of general tuberculosis. We may compare the injection of Koch's lymph to such a surgical operation, and thus explain the cases on record where miliar-tuberculosis appeared after an injection, and it will be necessary to demonstrate first by the most careful post-mortem the presence of only one localized tubercular nodule before we blame Koch's method for the production of general tuberculosis. It should also be demonstrated that the spreading of the bacilli was recent and had been induced by the tuberculine, and that demonstration will probably forever remain an impossibility. He had seen many cases where, after what appeared to be a complete recovery, new lesions appeared in places not affected before, and the explanation given had been that they represented latent nodules ; but as they did not put in their appearance until six to ten weeks after the treatment, this explanation had its objections. More objectionable yet is the assumption that these so-called latent nodules were not affected by the tuberculine, because it is always claimed that *recent* cases are influenced easiest. Certain it is that the tuberculine confers no immunity to the human body against the attacks of the bacillus, nor does it protect against a relapse.

The time of observation had been too short to determine whether the treatment by tuberculine should be modified or rejected, and physicians would have to learn constantly while using it, and record their observations for the benefit of medical science.

Prof. Koenig, of Göttingen, agreed with Von Bergman as to the certainty of the local re-action, and that the remedy should be used with the greatest care. His results had been more favorable since he commenced with small doses,—one-half milligram. His opinion of the treatment was decidedly hopeful. He had also tried iodoform injections, like Von Bergman, with the same negative results.

Schede, of Hamburg, looked upon tuberculine as the most valuable weapon known today to fight tuberculosis. He had never seen any serious symptoms following its use, but also advocated the use of very small doses to prevent fever as much as possible, and puts special stress upon the necessity of proper food, fresh air, hygienic surroundings, etc.

Lauenstein, of Hamburg; Von Eiselsberg, of Billroth's Clinic, in Vienna; and Kuester, of Marburg, all agree that tuberculine is a very useful therapeutic agent if care has been taken in selecting the cases to be treated.

Dr. Senger, of Crefeld, reports that in surgical tuberculosis, a valuable drug had been found in iodoform, but only in the treatment of tubercular joints. He claims that it is not the iodoform itself which acts, but the formic acid produced by the oxidation of the iodoform. Hence, if oxidation can take place, the iodoform acts, but not otherwise.

Dr. Rubinstein reports for Prof. Schüler, of Berlin, the record of 100 cases of localized gland, bone or joint tuberculosis treated with guajacol, and with a combination of surgical treatment and iodoform injections. The anti-tubercular action of guajacol, the active principle of creosote, had been demonstrated upon animals long ago, and out of fifteen patients treated by it, nine cases were cured, five are yet under treatment, and only one had to be discontinued.

The recently reported discovery of Prof. Liebreich, for the cure of tuberculosis, cantharidis, was discussed by Von Bergman, who stated that in his clinics the new remedy had been used in several cases of lupus, but without any results. Prof. Liebreich claimed on the other hand that a slow improvement *had* taken place in the condition of these patients, to which Von Bergman replied that these apparent improvements were nothing else than the peculiar changeable conditions always found more or less in patients suffering from lupus. Liebreich expressed the hope that time would determine the value of his remedy better than a discussion.

The paper I send you herewith¹ I have translated for the *JOURNAL*, as it, perhaps, represents the most condensed review of the tuberculine question. Dr. Thorner is one of the first six physicians to whom Dr. Koch gave a bottle of the lymph for trial, and he has been using it in a large private practice ever since.

JULIUS POHLMAN.

BERLIN, April 3, 1891.

1. Published on page 582 *et seq.*

BUFFALO MEDICAL AND SURGICAL JOURNAL.

A MONTHLY REVIEW OF MEDICINE AND SURGERY

EDITORS:

THOMAS LOTHROP, M. D. - - - WM. WARREN POTTER, M. D.

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Editorial.

ONE OF THOSE MISCHIEVOUS BILLS

IT WILL be remembered that in our "leader" in the April number we called attention to some pending legislation in this State, which was calculated to do harm to the reform in medical education that was so happily begun last year.

We are informed that the Student's Bill, introduced by Mr. Jacobs, providing for exemptions from the operations of the Law of 1890, has passed both houses of the Legislature, and is now in the hands of the Governor.

It is to be regretted that as soon as the Senate and the Assembly felt willing to grant a covering to the profession in opposition to this bill, Messrs. Jacobs and Blodgett, Secretary of the Society, have formed a plan to request the members of each house to request each of the members from their respective parties to support the bill in view of the failure of many members to do so. The result of this course will be that the efforts of the members and the many good men who were to be expected to support the bill will be completely nullified. The bill is now in the hands of the Governor, and it is to be regretted that the efforts of the members of the Legislature will be completely nullified. The bill is now in the hands of the Governor, and it is to be regretted that the efforts of the members of the Legislature will be completely nullified.

As we stated before, the bill is now in the hands of the Governor. We are persuaded to believe that he will not sign such a measure, but he will interpose his prerogative in some way. It is to be regretted that an Executive would not sign such a bill, but it is to be regretted that an Executive would not sign such a bill.

Examination and License as he did last year, and then with one stroke of his pen render it all nugatory or of little effect. We prefer to class Governor Hill as one of the staunch friends of medical reform in this State, and shall expect him to stand with his hands on the throttle to prevent any attempts to overthrow the good work that he and his co-laborers have erected. Had it not been for Governor Hill's steadfast interest in the principle involved we are sure that the law of last year would not have been perfected. We do not believe he will knock out in one round the magnificent structure which he participated in building. We regard him as too consistent a friend to higher standards of medical education, to strike such a blow at the efforts of good men who have labored with him in this good cause.

THE STATE EXAMINING AND LICENSING BOARD AGAIN.

SOME one has prayed to be delivered from his friends. We felt like repeating this prayer when we discovered the attitude of the two metropolitan medical weeklies toward the State Medical Examiners Law. We had suspected for some time past they were being weaned from the cause that they once espoused so heartily, but it was not until they both spoke out recently in such unmistakable English that we could believe that they were really opposed to the policy that many of the best medical men in the State think the wisest to pursue, at present, in regard to medical legislation. Briefly stated, this policy is about as follows: That, after several years' struggle, we have finally obtained a State Medical Examiners law; that, though it is not what was originally asked at the hands of the Legislature, it is believed to afford ample protection to the public, which is, after all, the real end sought; that it is well known that at the time it was passed we could get *no other kind of a law*, and, failing to accept this, New York could not expect to take position with the States that are improving their methods of medical education for many years; that good faith demands that the Medical Society of the State of New York shall sustain this law with its best efforts until it is fairly tested in a practical way; that then, if it shows defects they can be remedied upon application to the legislature; and that, until such time, all attempts at amendment shall be opposed with all the vigor and earnestness that a united society can present. Indeed, it may be further stated, as a general propo-

sition, that the State Medical Society is opposed to any further medical legislation whatever at present. We have had a surfeit of this kind of business lately, and it is best to wait until we can digest and codify what we have on hand before we ask for more. We presume the Legislature will be quite willing to join issue with us on this point.

The apparent grievance of the *Medical Record* is that the City of New York was not given the majority—or indeed any—representation on the State Examining Board, as announced in the newspapers. This is reviving the old sectional question that always springs up in the minds of some whenever anything is to be done in the way of making appointments; but, in this instance, we respectfully refer the *Record* to the Board of Regents of the University of the State of New York, where is vested the appointing power.

To the *New York Medical Journal* we desire to say that we are not in the habit of speaking in these columns without authority when we refer to the actions of a body of men; so, when we asserted in our April number that the University Bill had been introduced into the two houses of the legislature *without* the consent of the medical faculty of Niagara University, we did so advisedly. Moreover, we now re-affirm that the aforesaid faculty is not only *opposed* to that bill, but is in *favor* of the present law regarding State examination and license, desiring to have it tested before any attempt is made to amend or supplant it by further legislative action. And this, even though a single member of the faculty may have written a contrary statement to the *Journal*.

Furthermore, though the faculty in question has not yet taken *formal* action, we are informed that it will have an opportunity to do so at its next meeting. We are not aware that any "deservedly influential" members of the Erie County medical profession are to a great extent of the way of thinking on this question as is the *Journal*. We have been at some pains to inform ourselves on this subject, for we do not think it fair for the profession in this county to be misrepresented on such an important question.

NIAGARA UNIVERSITY MEDICAL COLLEGE.

THE annual commencement exercises of the medical department of Niagara University occurred on Tuesday, April 14, 1891.

The Alumni Association held its annual meeting in the morning at the college building. The address of welcome on behalf of

the faculty was delivered by Prof. Floyd S. Crego, M. D., who, in fitting words, traced the onward march of the school and the progress accomplished and to be accomplished. The dedication of the new building, and the establishments of new chairs and larger clinical facilities, were looked upon as most auspicious. Dr. Crego, in the course of his address, spoke approvingly of the new law providing for State examination and license. The response on behalf of the alumni was made by Dr. D. L. Redmond, President of the Association. The election of officers for the ensuing year resulted as follows :

President, J. J. Twohey, M. D. ; *Vice-President*, E. A. Forsyth, M. D. ; *Second Vice-President*, A. J. Colton, M. D. ; *Secretary*, W. H. Norrish, M. D. ; *Treasurer*, H. D. Ingraham, M. D. ; *Executive Committee*, E. A. Smith, M. D., M. J. O'Connell, M. D., E. N. Pfohl, M. D.

Doctors William C. Krauss and L. Bradley Dorr, of the faculty, were elected to active, and Dr. Charles S. Evans, of Cincinnati, to honorary memberships.

The afternoon session was devoted to the reading and discussion of papers.

Dr. William C. Krauss, of Buffalo, read a paper entitled, On the Behavior of Tendon Reflexes, in Health and Disease.

The second paper, On Bacteria and their Relation to Certain Diseases, was presented by Dr. Charles Seth Evans, of Cincinnati, Ohio. Both papers were interesting and instructive, and held the attention of those present.

In the evening the commencement exercises were held at the Star Theater, and the following named graduates were placed upon the record books as Doctors of Medicine : Jacob Frederick Meyer, Buffalo, N. Y. ; Daniel Francis Sullivan, Hartford, Conn. ; Thomas Joseph Burke, Newburg, N. Y. ; Franklin Charles Gram, Buffalo, N. Y. ; Francis William Maloney, Niagara Falls, N. Y. ; Robert Andrew Poynton, Greenwood, N. Y. ; Jacob Smith Peterson, Buffalo, N. Y. ; William Frederick Beutler, Buffalo, N. Y. ; John David Howland, Buffalo, N. Y. The commencement address was given by Dr. Simeon Tucker Clark, of Lockport. Immediately following these exercises many proceeded to The Genesee, where the Alumni banquet was held. Thus closed an important and successful year in the history of the Niagara Medical College.

The Spring session began April 20, 1891, to continue six weeks, and is well attended.

A STRING OF PEARLS FROM THE POST-GRADUATE
FOR APRIL, 1891.

WE TAKE pleasure in presenting to our readers this group of editorial paragraphs from the *Post-Graduate*, which we are sure will prove of interest :

The signs of the times for medical science are promising. In the State of New York we now have a compulsory three years' course, prefaced by a compulsory preliminary examination, and ended by an independent examination for a license to practise before a Board of Medical Examiners appointed by the State. Certainly we are having legislation enough to get on.

The State Medical Society was a noble gathering, probably one of the largest that ever has been held. Dr. Reed, of Cincinnati, at the dinner at the Delavan House, in view of the feeble condition and small numbers of the Ohio State Medical Society, suggested that he had better go home and get up a secession, so that it might be invigorated as the New York Society seems to have been. Indeed, the secession of 1882 does not seem to have decreased the numbers or diminished the enthusiasm of the Society that was founded in 1807, and has not failed to have a meeting every year since. New men are coming in fast, to fill the places of those who have passed away, or who have become old in the service. The scientific work will compare favorably with that of any society in the country, while the social element predominates very strongly. Dinners, public and private, are given, beginning on Monday night, until the close of the session. The Albanians, with their proverbial hospitality, do everything possible to abate the rigor of the Northern winter and the bad quality of their drinking water, during the three days that the Society is in session in the ancient capital. Do all they can, the winter is always bad when the Society meets, but it makes a good break in it, and the countrymen as well as the New Yorkers seem to enjoy the dissipation exceedingly.

The most important work of the Society, in a political sense, was the nomination of fourteen men, from whom the Regents should select seven to be examiners in medicine and surgery. For, after this, unless the law is repealed, no man can practise medicine in the State of New York, except those already in the profession, unless he shall have received a license from this Board.

New York City has two very interesting and ably conducted

weekly medical journals, but although the greatest medical event that has occurred in the State for many a year was consummated at Albany, when fourteen members of the profession were named to the Board of Regents from whom to select seven examiners who should determine all those to whom a license to practise medicine in the State should be granted, so far as we have observed, no leader or editorial paragraph as to the final triumph of the reform—for which one of them has often shrieked itself hoarse—was to be seen the week after the Medical Society adjourned, or the week after that.

And now that we are on that subject, it will relieve us to say that, although medical bills are being presented to the Legislature almost every week—bills affecting the interest of the medical profession, and through them of the public throughout the State—the publishers of these journals do not seem to be willing to pay the few dollars necessary to send a record to the medical profession of what is going on. We cannot imagine it is the fault of the editors; they certainly must know what a valuable contribution this would be to the medical news of the day.

Perhaps the *Record* said nothing about the fourteen names because one of them was that of the editor of that journal. Certainly, however, one of the staff might have ventured to make a few comments on the others.

Reforms are born with many throes, while abuses and evil systems die hard. Already a bill has been introduced into the Legislature, to practically annul the new law for three years, and all this to allow some youths who began the study of medicine before June, 1890, to pass their examination in the good old way before the college faculty. If there was no need for an independent examination, why this solicitude to pass only the faculty examinations? Poor tender youths, the profession can readily spare them! If we except them, why not also those who began before the year 2000, and so on? Is there any particular virtue in any young man who began the study of medicine before 1890, that he should be exempted before the provisions of the law that the State Legislature had been almost fifteen years in passing?

If we do not mistake the temper of the Legislature, they will not tinker with this State Examination Law this year, but will allow the people to give it a trial before it is amended or repealed. They have heard too many committees and too much talk in the

last ten years, not to know that the subject of a State Examining Board is exhausted, for a time at least, and that a rest from the whole subject is demanded until we know what legislation has accomplished.

NATIONAL CONFERENCE OF STATE MEDICAL EXAMINING BOARDS.

DR. JOHN H. RAUCH, Secretary of the Illinois State Board, has, at the suggestion of Dr. William Perry Watson, Secretary of the New Jersey Board, issued a letter of invitation for representatives of the several State Examining and Licensing Boards to meet in Washington, D. C., May 6, 1891, during the meeting of the American Medical Association. It is proposed at the meeting to effect a permanent organization, consider rules relating to uniformity of practice in the conduct of the examinations, and to transact such other business as may come before the conference. The suggestion seems to be a good one, and it is presumed there will be a full attendance of representatives of the twenty-one State Boards now in existence.

THE *Journal of Gynecology*, edited by Dr. Charles N. Smith, Toledo, O., has made its appearance, and it is very faint praise to say that it is a credit to the special department of medicine which it chronicles, as well as to its accomplished editor and proprietor. It is a sixty-four page monthly devoted to Gynecology, Obstetrics, and Abdominal Surgery, and easily takes rank with the best journals of the country. Its first number is devoid of that freshness of youth generally manifested in such, and in reality appears like a veteran in its make-up, proof reading, and material. We cordially welcome it to our exchange table, and commend it to all who are interested in its field. Subscription price, \$1.50 a year.

TWENTY-ONE States are now proudly marching in the column of medical reform, with separate Examining and Licensing Boards. New York is one of the latest additions, and it would be a pity to see it put in a little squad by itself because the students don't like the measure. The law was framed to benefit the people, and will be a vast gain to the public health if let alone to work out its blessings.

CIVIL SERVICE EXAMINATION FOR PHYSICIANS.—An open competitive examination of candidates for Junior Assistants and

Female Physicians in the State Hospitals for the Insane, will be held by the State Civil Service Commission at the Capitol, in Albany, June 11th. Candidates must be residents of the State, and must have had one year's hospital experience or three years' experience in the general practice of medicine.

Personal.

DR. L. S. McMURTRY, of Louisville, Ky., President of the Southern Surgical and Gynecological Association, delivered two lectures before the Alumni Association of the College of Physicians and Surgeons, of Baltimore, at the College Building, corner Calvert and Saratoga streets, on Saturday evening, April 11th, at eight o'clock, and on Monday afternoon, April 13th, at five o'clock. Subject: The Pathology, Diagnosis, and Treatment of Ectopic Gestation.—*Times and Register.*

DR. C. C. FREDERICK, of Buffalo, Adjunct Professor of Obstetrics in Niagara University Medical College, sailed for Europe, April 30, 1891, in the Hamburg-American steamer *Augusta-Victoria*. Dr. Frederick expects to be absent about six months, and will spend most of this time in study in the hospitals and clinics. He was accompanied by Mrs. Frederick.

DR. NICHOLAS SENN, of Milwaukee, was promptly chosen to the chair of surgery in Rush Medical College, Chicago, made vacant by the death of Professor Parkes. Dr. Senn's acceptance was announced in the *Milwaukee Sentinel*, of April 6, 1891.

Society Notes.

DR. CHARLES A. L. REED, of Cincinnati, Chairman of the Section of Diseases of Women in the American Medical Association, has written a letter to the Journal of the Association, in which he advocates the organization of a Pan-American Medical Congress. He will present the subject at the meeting of the Association to be held in Washington, May 5-8, 1891, and hopes to have it there endorsed, and the machinery put in operation to perfect the scheme. In view of the recent legislation looking to a more intimate com-

mercial relation between the United States and the South American republics, we are of the opinion that the proposition of Dr. Reed should be given serious consideration by the Association.

THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK will hold its next annual meeting in Buffalo, June 2, 1891. Arrangements are in progress looking to an interesting and profitable meeting. As this is the first time the Association has visited Buffalo, it is hoped that an effort will be made by the local profession to attend and contribute to its success.

Obituary.

DR. CHARLES T. PARKES, Professor of Surgery in Rush Medical College, Chicago, Ill., died after a brief illness on Saturday, March 28, 1891, of pneumonia. Dr. Parkes stood conspicuously in the front rank of American surgeons, and his death leaves a gap therein not easily filled.

Book Reviews.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. Vol. IX., No. 1, January, 1891; No. 2, February, 1891; and No. 3, March, 1891. William Wood & Co., 56 and 58 Lafayette place, New York. Monthly, \$10.00 a year; single copies, \$1.00.

The third year of this valuable series of monographs began with the January number, which contains: *Advances in Bacteriology*, by Robert Koch, M. D.; *Formulary of New Remedies and New Medicinal Preparations*, by H. Bocquillon-Limousin; and *Anesthetics: A Discussion*, by Dr. William Macewen and others.

The February number contains a chapter on the *Clinical Use of Prisms and the Decentring of Lenses*, by Ernest E. Maddox, M. B.; *Electricity in the Treatment of Uterine Tumors*, by Thomas Keith, M. D., LL. D., and Skene Keith, F. R. C. S.; and *Ether-Drinking: Its Prevalence and Results*, by Ernest Hart.

The March number contains: *The Modern Diagnosis of Diseases of the Stomach*, by Dr. J. M. Purser, Dublin; *Unsoundness of Mind, in its Legal and Medical Considerations*, by J. W. Hume Williams, London; *Baldness and Greyness: Their Etiology, Pathology, Treatment*, by Tom Robinson, M. D., London.

These three numbers, comprising Volume IX., fully maintain the previous high standard of these publications, and ought to find ready sale.

A **DICTIONARY OF PRACTICAL MEDICINE.** By various writers. Edited by J. KINGSTON FOWLER, M. A., M. D., Fellow of the Royal College of Physicians; Senior Assistant to the Middlesex Hospital, and Lecturer on Pathological Anatomy in the Medical School; Senior Assistant Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. 8vo; pp. xxvi.—942. Philadelphia: P. Blakiston, Son & Co. 1890. Buffalo: Peter Paul & Bro.

Since a reference book is a necessity, it is well to have a good one. Not every physician feels that he can equip his book-shelves with the larger dictionaries of medicine—the encyclopedias—so there must needs be smaller works. There is no danger of our being misunderstood when we admit that reference books are needful. Every physician must refresh his memory on some point, especially when writing, that general treatises either do not supply at all, or else bury the information sought so deeply that it is difficult to find it. The book before us will be found a great help to such, as well as to the young physician who does not yet feel able to purchase a complete library. The names of the contributors are a guaranty of accuracy, and we hesitate not to pronounce this book one of the best of its kind,—safe, advanced, and yet within the reach of the most modest purse.

TWELVE LESSONS ON THE STRUCTURE OF THE CENTRAL NERVOUS SYSTEM FOR PHYSICIANS AND STUDENTS. By Dr. LUDWIG EDINGER, Frankfurt-on-the-Main. Second revised edition, with 133 illustrations. Translated by Willis Hall Vittum, M. D., St. Paul, Minn. Edited by C. Eugene Riggs, A. M., M. D., Professor of Mental and Nervous Diseases, University of Minnesota; member of the American Neurological Association. 8vo, pp. xii.—230. Philadelphia and London: F. A. Davis. 1890. Price, \$1.75 net.

This is an excellent translation of Prof. Edinger's well-known work on the Anatomy of the Nervous System. The editor's prominence in American neurological circles tends to make the book more authoritative and reliable, especially on this side of the Atlantic. Many of the new terms employed in anatomical nomenclature have been used by the editor and translator, and it is to be hoped that in the preparation of the Second American Edition still more may find their way into its pages. The 133 illustrations are taken from the German edition.

The typography is up to the high standard of the publisher, and adds much to the beauty of the book.

THE STORY OF THE BACTERIA AND THEIR RELATIONS IN HEALTH AND DISEASE. By T. MITCHELL PRUDDEN. 76mo, p. 143. New York and London : G. P. Putnam's Sons. The Knickerbocker Press. 1891. Price, 75c.

Within the past few years the study of the bacteria has made incomparable strides and their characteristics and pathogenic virtues have been carefully and diligently noted. The general practitioner and the scientifically inclined physician have not had the opportunity or time to look into the subject carefully, and the larger works on this subject have been ignored. This little book is intended for just this class of readers—taking up the subject in a popular and persuasive manner, being careful to preserve simplicity and intelligibility. The book is further enhanced by the many hygienic points, which the author frequently throws out in connection with the various pathogenic organisms.

The typography is neatly and carefully executed, and is similar to the author's "Dust and Its Dangers." W. C. K.

THE YEAR-BOOK OF TREATMENT FOR 1891. A Critical Review for Practitioners of Medicine and Surgery. Philadelphia : Lea Brothers & Co. 1891.

This annual, which is published in duodecimo form and contains 480 pages, is one of the best reference books that comes to the hands of the physician. The work of the twenty contributors is exceptionally good, and we think the volume admirably fills the place it is designed to occupy. It is a pleasure to have, once in awhile, a book published for practitioners especially, and we think those who are fortunate enough to possess this one ought to appreciate the enterprise of the publishers in serving the profession so admirably.

DUST AND ITS DANGERS. By T. MITCHELL PRUDDEN, M. D. Author of "A Manual of Practical Histology," "The Story of the Bacteria," etc., Illustrated. 16mo, cloth P. 111. G. P. Putnam's Sons, New York, 27 W. Twenty-third St. London, 27 King William Street Strand. 1890. Price, 75c.

Dr. Prudden handles this subject very expertly, and shows that this omni-present article may be an important factor in the transmission of disease. The Presence of Microorganisms in Dust is virtually his text; and the dangers thereof is made manifestly apparent. It is an attractive and at the same time useful little work, and could be read with much benefit by the masses.

W. C. K.

PROFESSOR KOCH'S METHOD TO CURE TUBERCULOSIS POPULARLY TREATED BY DR. MAX BIRNBAUM. Translated from the German by Dr. F. R. BREUDICKE. Milwaukee, Wis.: H. E. Haferkorn. 1891. Pp. 105. Price, paper, 75c.; cloth, \$1.00.

The little work before us gives a compact *résumé* of our knowledge of tuberculosis, treated in a popular manner for physicians and the laity. Prof. Koch's first communication on the curability of tuberculosis, as published in the *Deutsche Medicinische Wochenschrift*, is appended. The frontispiece is an excellent likeness of Prof. Koch.

BOOKS AND PAMPHLETS RECEIVED.

Sanders' Question Compends No. 2. Essentials of Surgery, together with a full description of the Handkerchief and Roller Bandage. Arranged in the form of questions and answers; prepared especially for students of medicine. By Edward Martin, A. M., M. D., Instructor in Operative Surgery, University of Pennsylvania; Surgeon to the Howard Hospital; Assistant Surgeon to the University Hospital. Illustrated; fourth edition, revised and enlarged by an appendix, containing full directions and prescriptions for the preparation of the various materials used in Antiseptic Surgery. Also several hundred receipts covering the medical treatment of surgical affections. Philadelphia: W. B. Sanders. 1891. Price, \$1.00.

Koch's Remedy in Relation specially to Throat Consumption, By Lennox Browne, F. R. C. S. Ed., Senior Surgeon to the Central London Throat, Nose, and Ear Hospital; author of "The Throat and Nose, and their Diseases," etc. Illustrated by thirty-one cases and by fifty original engravings and diagrams. Philadelphia: Lea Brothers & Co. 1891.

Surgery: A Practical Treatise with Special Reference to Treatment. By C. W. Mansell Moullin, M. A., M. D., Oxon. Fellow of the Royal College of Surgeons; Surgeon and Lecturer on Physiology to the London Hospital; Formerly Radcliffe Traveling Fellow and Fellow of Pembroke College, Oxford, England. Assisted by various writers on special subjects. With 500 Illustrations, 200 of which have been made for this work from special drawings. 8vo pp. viii.—1180. Philadelphia: P. Blakiston, Son & Co. 1891. Buffalo: Peter Paul & Brother.

A Text-Book of Bacteriology. By Carl Fraenkel, M. D., Professor of Hygiene, University of Königsberg. Third edition; translated and edited by J. H. Linsley, M. D., Professor of Pathology and Bacteriology, Medical Department of the University of Vermont; Demonstrator of Pathology and Bacteriology, New York Post-Graduate Medical School and Hospital, etc., etc. Octavo, 380 pages. Extra muslin, \$3.75. New York: William Wood & Company.

Practical Treatise on Electricity in Gynecology. By Egbert H. Grandin, M. D., Chairman Section on Obstetrics and Gynecology, New York Academy of Medicine; Obstetric Surgeon, New York Maternity Hospital; Obstetrician, New York Infant Asylum, etc., and Josephus H. Gunning, M. D., Instructor in Electro-Therapeutics, New York Post-Graduate Medical School and Hospital; Gynecologists to Riverview

Rest for Women; Electro-Gynecologist, North-Eastern Dispensary, etc. Illustrated. Octavo, 180 pages. Muslin. \$2.00. New York: William Wood & Company.

Diseases of the Digestive Organs in Infancy and Childhood, with chapters on the Investigation of Disease; the Diet and General Management of Children, and Massage in Pediatrics. By Louis Starr, M. D., Late Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, etc. Second edition; illustrated. Philadelphia: P. Blakiston, Son & Co. 1891.

Diabetes: Its Causes, Symptoms, and Treatment. By Charles W. Purdy, M. D., Queen's University; Honorary Fellow Royal College of Physicians and Surgeons, Kingston; Member of the College of Physicians and Surgeons of Ontario, etc. No. 8 in the Physicians' and Students' Ready Reference Series. With Clinical Illustrations. Philadelphia and London: F. A. Davis. 1890. Price, \$1.25.

The Daughter, Her Health, Education, and Wedlock. Homely Suggestions for Mothers and Daughters. By William Capp, M. D. Philadelphia and London: F. A. Davis. 1891. Price, \$1.00, net.

Manual of the Domestic Hygiene of the Child. For the use of Students, Physicians, Sanitary Officials, Teachers and Mothers. By Julius Uffemann, M. D., Professor of Internal Medicine at the University of Rostock. Translated, with the author's kind permission, by Harriot Ransom Willinowski. Edited by Mary Putnam Jacobi, M. D. Octavo, pp. x. - 229. New York and London: G. P. Putnam's Sons. *The Knickerbocker Press*. 1891.

A Compend of Gynecology (Quiz-Compenda, No. 7). By Henry Morris, M. D., Late Demonstrator of Obstetrics and Diseases of Women and Children in the Jefferson Medical College, Philadelphia. With forty-one illustrations. Philadelphia: P. Blakiston, Son & Co. 1891.

Electricity: Its Application on Medicine and Surgery. A Brief and Practical Exposition of Modern Scientific Electro-Therapeutics. By Wellington Adams, M. D. In two volumes. 12mo. Physicians' Leisure Library. Detroit: George S. Davis. 1891. Price, cloth, 50 cents; paper, 25 cents.

Taking Cough. By Francke H. Bosworth, M. D., Professor of Diseases of the Throat in the Bellevue Hospital Medical College of New York. Physicians' Leisure Library. Detroit: George S. Davis. 1891. Price, cloth, 50 cents; paper, 25 cents.

King's Journal Directory and Buyer's Guide. For the Convenience of Publishers, Advertisers, Manufacturers, etc., etc. Compiled and edited by Ferdinand King Pn Co. Vol. II. New York: Dr. F. King. Publisher. 1891. Price, 50 cents.

Medical Education, Medical Colleges, and the Regulation of the Practice of Medicine in the United States and Canada. 1785-1891. Medical Education and the Regulation of the Practice of Medicine in Foreign Countries. 1785-1891. State Board of Health. By John H. Rauch, M. D., Secretary. Springfield, Ill.: H. W. Rokker. State Printer and Binders. 1891.

The Professional Concision. No. 5. A Price-list of Stationery. By Fred D. Van Hook. 260 Broadway, New York.

Pustular Eruptions of the Uterus. Remarks upon Pathology and Treatment. By James S. Stone, M. D. Washington, D. C. Reprint:

Transactions American Association of Obstetricians and Gynecologists. Volume III. 1890.

Inflammation in and about the Head of the Colon. By L. S. McMurtry, M. D., Gynecologist to Sta. Mary and Elizabeth Hospital; Fellow of the American Association of Obstetricians and Gynecologists. etc., Louisville, Ky. Reprint: *The Medical News*, January 10, 1891.

An Analysis of the Ocular Symptoms found in the Third Stage of General Paralysis of the Insane. By Charles A. Oliver, M. D., of Philadelphia. Reprint: *The Medical News*, September 20, 1890.

Annual Report of the Health Department of the City of Baltimore to the Mayor and City Council, for the year ending December 31, 1890. From George H. Rohé, M. D., Commissioner of Health and Registrar. Baltimore: John Cox, City Printer. 1891.

Cornell University, College of Agriculture. Third Annual Report of the Agricultural Experiment Station. Illustrated. Ithaca, N. Y.: Published by the University. 1891.

A Further Study of Anodal Diffusion as a Therapeutic Agent. By Frederick Paterson, M. D., Attending Physician to the New York Hospital for Nervous Diseases. Reprint: *The Medical Record*, January 31, 1891.

A Second Note upon Homonymous Hemipic Hallucinations. Same author. Reprint: *The New York Medical Journal*, January 31, 1891.

Proceedings and Addresses at a Sanitary Convention held at Battle Creek, Mich., June 25-26, 1890. Supplement to the Report of the State Board of Health for 1890. Lansing: Robert Smith & Co., 1891.

A Case of Intra-cranial Neoplasm, with Localizing Eye Symptoms. Position of the Tumor verified at Autopsy. By Charles A. Oliver, M. D., Philadelphia. Reprint: *Archives of Ophthalmology*, Volume XX., No. 1, 1891.

Zehn weitere Fälle von Ventrofixatio Uteri Retroflexi. Von Dr. Sperling, früher zweitem Assistenzarzt an der Königl. Frauenklinik in Dresden, jetzt in Moabit bei Berlin. Mit einem Zusatz von Professor Dr. Leopold. Sonderabdruck aus der *Deutschen Medicinischen Wochenschrift*, 1891, No. 5. Redacteur: Geh. Sanitätsrath Dr. S. Guttman. Leipzig: Verlag von Georg Thieme. 1891.

The Modern Antipyretics: Their Action in Health and Disease. By Isaac Ott, M. D., Consulting Physician to the Easton Hospital, Easton, Pa. 8vo. pp. 52. E. D. Vogel. 1891.

Bacteriology and Preventive Medicine. By Stephen Smith Burt, A. M., M. D., Professor of Clinical Medicine and Physical Diagnosis, New York Post-Graduate Medical School and Hospital, etc. Reprint: *The Post-Graduate*, April, 1891.

Intra-Peritoneal Myo-Fibroma of the Rectum, weighing twelve pounds, successfully removed by Laparotomy. By N. Senn, M. D., Ph. D. Reprint: *The Weekly Medical Review*, March 21, 1891.

Annual Message of Hon. Charles F. Bishop, Mayor of Buffalo. January, 1891. Buffalo: Times Printing House. 1891.

Atypic Herpes Zoster Gangrenosa, with Report of two Cases. By Benj. Merrill Ricketts, Ph. B., M. D., Cincinnati, O. Reprint: *Journal of the American Medical Association*, November 29, 1890.

The Radical Treatment of Hernia, with the Report of two Unique

Cases. By Benj. Merrill Ricketts, Ph. B., M. D., Cincinnati, O. The Surgical Treatment of Epilepsy. Same author. Reprint: Cincinnati *Lancet-Clinic*, January 24, 1891.

On the Employment of Women Physicians in Hospitals for the Insane. By Edward N. Brush, M. D., Philadelphia, Pa. Reprint: *American Journal of Insanity*, January, 1891.

Carlsbad, and the Natural Carlsbad Sprudel Salt in Powder form. The Eisner and Mendelson Company, sole agents, New York and Philadelphia.

Chronic Urethritis. By L. Bolton Bangs, M. D., Surgeon to St. Luke's and Charity Hospital, New York. Reprint: *The Therapeutic Gazette*, February 16, 1891.

Macroscopic Vocabulary of the Brain, with Synonyms and References, together with other reports. By Burt. G. Wilder, M. D., Professor of Comparative Anatomy, etc., in Cornell University.

A Case of Successful Trephining for Subdural Hemorrhage, produced by Contre-Coup. By John Homans, M. D., Visiting Surgeon to Massachusetts General Hospital; and George L. Walton, M. D., Physician to the Neurological Department of the same. Reprint: *Boston Medical and Surgical Journal*, February 12, 1891.

Reports of the Trustees and Superintendent of the Butler Hospital for the Insane, presented to the Corporation at its Forty-seventh Annual Meeting, January 28, 1891.

Sulfonal-Bayer. Recent Observations on its Value. William H. Schieffelin & Co., New York.

The Blood and Blood-Vessels, in Health and Disease. By Wesley Mills, M. A., M. D., Professor of Physiology in McGill University, Montreal. Reprint: *The New York Medical Journal*, September 13, 1890.

Original Research in Relation to Animal Economics. A Socialistic Study. By Frank S. Billings, M. D. Reprint: *The Times and Register*, January 24, 1891.

The Johns Hopkins Hospital Reports. Report in Surgery I. The Treatment of Wounds with Especial Reference to the Value of the Blood-Clot in the Management of Dead Spaces. By William S. Halstead, M. D.

Le Courant Continué en Cydologie. (1) Alliage. Technique.—Effets Physiologiques. Publié par Le Docteur Georges Gauthier, Paris, 1890. A. Maloine Editeur.

Experimento de Varías Causas de Estímulo y de Anestesia Anatómicas Anatómicas de Agarrado, Cerebral, de la Mente. Por Dr. D. Juan Soler y Bascallá. Barcelona, 1890.

A Descriptive and Comparative Cydology. By George Thomas Jackson, M. D. New York, 1890.

Vagina, Hypertrophy for Malignant Disease of the Uterus. By Florian Key, M. D. New York. Reprint: *American Journal Obstetrics & Gynecology*, January, 1891.

Experimento de Inoculación Venérea en a Peder-Hermaphrodite. By Florian Key, M. D. Reprinted in the *German Hospital*, New York. Reprint: *American Journal Obstetrics & Gynecology*, January, 1891.

Trichotomies, Hypertrophy. A new method of Ventral Fixa-

tion of the Uterus, without Opening the Peritoneal Cavity. By Florian Krug, M. D. Reprint: *The New York Medical Journal*, January 3, 1891.

Therapeutic Oxygen. By Samuel S. Wallian, A. M., M. D., of New York. Reprint: *The Medical News*, May 7, 1890.

Notes on the Examination for Tubercle Bacilli. By Ludwig Weiss, M. D. Reprint: *The New York Medical Journal*, January 17, 1891.

Thirteenth Annual Report of the Presbyterian Eye, Ear, and Throat Charity Hospital, Baltimore, Md.

Tonic Reconstituents. By A. Lutaud, M. D., Paris. Reprint: *Journal de Médecine de Paris*, January 18, 1891.

A Study of Sterility: Its Causes and Treatment. By Thomas W. Kay, M. D., Scranton, Pa. An Essay which received the first prize of the Alumni Association of the College of Physicians and Surgeons, Baltimore. Reprint: *Journal American Medical Association*, February 7, 14 and 21, 1891.

On the Dangers Arising from Syphilis in the Practice of Dentistry. By L. Duncan Bulkley, A. M., M. D., Attending Physician to the New York Skin and Cancer Hospital. Reprint: *International Dental Journal*, August and September, 1890.

Des Résultats Immédiats et Éloignés du Traitement Électrique des Fibromes Utérins, par la method du Docteur Apostoli. Par Mlle. Félicia Jakubowska, Docteur en Médecine de la Faculté de Paris. Paris: Octave Doin. 1890.

Charter, Constitution and By-Laws, List of Fellows, and Current Medical Periodicals on file in the Library of the New York Academy of Medicine. 1891.

The Rational Treatment of Uterine Displacements, based upon a Consideration of the Pathological Conditions Present. By Augustus S. Goelet, M. D., New York. Reprint: *American Journal Obstetrics*, February, 1891.

A Case of Epilepsy with Double Consciousness. By G. R. Trowbridge, M. D., Assistant Physician to the State Hospital for the Insane, Danville, Pa. Reprint: *The Medical News*, February 21, 1891.

Report of a Case of Large Interstitial Fibroid of the Uterus, Removed by Abdominal Section. By Thomas H. Manley, M. D., Visiting Physician to Harlem Hospital, New York. Reprint: *The Brooklyn Medical Journal*, February, 1891.

Resection of the Optic Nerve. By L. Webster Fox, Philadelphia. Reprint: *The Medical and Surgical Reporter*.

My Recent Experience in Operating for the Lacerations of the Perineum, involving the Sphincter Ani, with a description of my Method of Flapsplitting. By Horace Tracy Hanks, M. D. New York: Reprint Vol. XV. Transactions American Gynecological Society. 1890.

Deafness as a Result of Nasal and Dental Disease. By D. H. Goodwillie, M. D. Reprint: *The New York Medical Journal*, August 24, 1889.

A Death Caused by a Uterine Dilator. With some remarks as to the proper method of using the Dilator. By Howard A. Kelly, M. D. Reprint: *American Journal Obstetrics*, Vol. XXIV., No. 1. 1891.

Amygdalotomie et Hémorrhage. Par le Docteur E. J. Moure, Professor libre des Maladies du Larynx, des Oreilles, et du Nez. Paris: Octave Doin. 1891.

A Submembraneous Local Treatment of Pharyngeal Diphtheria. By A. Seibert, M. D., New York. Reprint: *The New York Medical Journal*, December 6, 1890.

In What Class of Wounds shall We Use Drainage? By Henry Orlando Marcy, A. M., M. D., L. L. D. Boston: Reprinted from the Transactions American Association Obstetricians and Gynecologists. Vol. III. 1890.

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Surgical Relief for Biliary Obstruction. By Henry O. Marcy, M. D. Boston: Reprint: *The Journal American Medical Association*, December 20, 1890.

The Non-Operative Treatment of Delayed Union in Fractures of the Leg. By John Ridlon, M. D., New York. Reprint: *The Medical Record*, January 31, 1891.

The Treatment of Arterio-Venous Aneurism, with Two Cases Treated by Extirpation. By B. Farquhar Curtis, M. D., New York. Reprint: *The American Journal of the Medical Sciences*, February, 1891.

The Franklinic Interrupted Current, or my New System of Therapeutic Administration of Static Electricity. By William James Morton, M. D., New York. Reprint: *The Medical Record*, January 24, 1891.

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On the Subjection of Consumption. By Wm. H. Dukeman, M. D., Los Angeles, Cal. Reprint: *The Pacific Medical Journal*.

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Tennessee State Board of Health. February 20th. March 20th. and April 20, 1891.

Michigan State Board of Health, March, 1891.

New York State Board of Health, February and March, 1891.

Newport. R. I., Board of Health, February. March, 1891.

Abstract of Sanitary Reports, U. S. Marine Hospital Service. Vol. VI., Nos. 9, 10, 11, 12, 13, 14, 15, and 16, 1891.

Miscellany.

"THE HOME-MAKER."—*The Home-Maker* is just what the name indicates. Since Jenny June became the editor, it has steadily improved, until it is now one of the best magazines published. The April number is an excellent one, with enough illustrations to make it very interesting and readable. It abounds in bright stories, poetry, interesting articles and book notices, and all that goes to make up a magazine. Special mention should be made of the Cycle Department, devoted to the interests of federated women's clubs: a department we believe no other magazine has.

J. B. LIPPINCOTT COMPANY will, beginning with April, issue quarterly thereafter a work entitled "International Clinics." This work will comprise the best and most practical clinical lectures on medicine, surgery, gynecology, pediatrics, dermatology, laryngology, ophthalmology, and otology, delivered in the leading medical colleges of this country, Great Britain, and Canada. These lectures have been reported by competent medical stenographers, and thoroughly revised by the professors and lecturers themselves. The object of the work is to furnish the busy practitioner and medical student with the best and most practical clinical instruction, in concise form. Each volume will consist of over 350 octavo pages, illustrated with photographic reproductions of important cases.

LIFE AMONG THE LEPERS.—Sister Rose Gertrude has written another article for *The Ladies' Home Journal* for June, on "What It is to Be a Leper," in which she gives a clear glimpse of leper life in Molakai; how the disease is contracted; how it is treated and cured, and how the lepers live in their exile.

OVER 15,000 MANUSCRIPTS SENT TO ONE MAGAZINE, OF WHICH NOT 200 WERE ACCEPTED.—Mr. Bok, the Editor of *The Ladies' Home Journal*, recently gave some interesting figures relative to the manuscripts received by his magazine during 1890. Owing to its departments and peculiar character, the *Journal* probably receives more manuscripts than any magazine published. Mr. Bok says that he received at his office a total number of 15,205 manuscripts. Of these, 2,280 were poems; 1,746 stories and 11,179 miscellaneous articles. Of the poems, 66 were accepted; of the stories, only 21, and of the articles 410, of which latter, however, over 300 were solicited articles. Thus, it will be seen that of the entire 15,000 manuscripts only 497 were accepted; a trifle over three per cent. Deducting from this the 300 accepted articles written at the Editor's solicitation, the net percentage of unsolicited manuscripts accepted is brought down to 197, or a little more than one per cent. Statistics such as these show how much utter trash is being written, and the number of persons writing who ought to be employing their time at something else and better.

NOTICE TO CONTRIBUTORS. — We are glad to receive contributions from every one who knows anything of interest to the profession. Articles designed for publication in the JOURNAL should be handed in before the first day of the month. The Editors are not responsible for the views or opinions of contributors. All communications should be addressed to

284 FRANKLIN STREET, BUFFALO, N. Y.

ARISTOL.

From the *Austro-Hungarian Dental Quarterly*, October, 1890.

ARISTOL. — A NEW ANTISEPTIC IN DENTISTRY.

By J. V. KEJZLAR, of Jiclu.

SOME time since my attention was drawn to a new, powerful antiseptic, the thymol derivative, called Aristol, discovered by Drs. Messinger and Vortmann, of Aachen.

It is the best substitute for iodoform, which, on account of its disgusting odor, is especially abhorred by patients who have disorders of the mouth or teeth. Aristol has no disagreeable odor, and is easily endured by sensitive patients. It has no toxic properties like iodoform, does not irritate, adheres very readily to loose lying pulps, and has excellent healing properties.

I tried it in all cases of the most varied tooth complaints, in which the hitherto available antiseptics had been used, such as gangrenous pulps, antiseptic for the root canals, disinfection of carious cavities, before introducing the filling, and so on.

On gangrenous pulps, I strewed Aristol in powder, with a fine brush, for disinfecting the root canals and carious cavities. I used a ten per cent. solution of Aristol in sulphuric ether; through the rapid evaporation of the ether, the Aristol forms an even coating and rapidly dries the cavity.

For fistulous spaces. I use small rods made of ten parts cacao butter, and one part Aristol, by which granulation and healing proceed rapidly.

Aristol is insoluble in water, but readily soluble in sulphuric ether, collodium and fatty substances. It is generally used in ten per cent. solution, or directly in the powdered form, externally for wounds, all kinds of swellings, for eruptions, syphilis, ozæna, otorrhœa nasofaryngeal syphilis, in gynecology and where ever antiseptics are indicated for external use.

Aristol may be regarded as an enrichment of *materia medica*, especially for disorders of the teeth, and it is very desirable that the remedy be further tried in this direction.

POPULAR FAITH IN ALTERATIVES. — Since the nature of the action of this class of remedies is to some extent, as yet, undetermined and obscure, they are necessarily prescribed empirically. To this fact is, perhaps, due the promiscuous use by the public, not infrequently with the endorsement of physicians, of a host of nostrums of no real medicinal value. Many of these have had an enormous sale, indicative not so much of their worth as of the general belief in the necessity for the use of what are popularly termed "blood purifiers." Spring is the season when these are most generally resorted to.

When we consider that there is no condition of disease at some stage of which tonic alteratives are not indicated, it will be appreciated, that next to agents such as opium and quinine, the action of which is specific, no class of remedies are more frequently demanded.

Messrs. Parke, Davis & Co. supply, under the name of Syrup Trifolium Compound, an alterative formula containing red clover, *stillingia*, *cascara amarga*, burdock root, poke root, prickly ash bark, *berberis aquifolium*, all valuable vegetable alteratives, either with or without potassium iodide. This has been used by physicians with much success in all conditions requiring alterative treatment.

DR. THOS. LITTLE, of Spirit Lake, Ia., in comparing Papine with other kinds of opiums says: "I have been using Papine for the past two months. It meets the requirements of a class in which opiates are indicated, but in which the 'remedy is worse than the disease.' One case in particular has given me a great deal of trouble for years. I have tried opium in every form, and many other narcotics, alone and in combination; but constipation, nausea and nervous prostration have been the invariable results. Some two months since I obtained some papine and commenced on this case with the happiest effect; no nausea, no constipation, no prostration. I have been prescribing it in my practice since with the greatest satisfaction to myself and my patients."

W. R. WARNER & Co. are evidently determined to keep in the van of therapeutic remedies. "Antalgic Saline" appeals to us today for recognition as a remedy for the relief of "headache," also for influenza and neuralgia, and as an antidote of "la grippe" they issue the "Pil. Chalybeate Compound":

Composition carb. protoxide of iron, grs., 2½.

Ext. nuc. vom..... gr. ¼.

Sig.: One pill every four hours, and increase to two pills three times a day.

Antalgic Saline, one dessertspoonful every four or five hours, till relieved, for headache. The same mode of administration precedes that of the chalybeate pills for "la grippe."—*Weekly Medical Review*.

TREATMENT OF HEADACHES BY NITRO GLYCERIN.—Dr. Trusevich publishes (in *Ejenedelnaya Klinicheskaya Gazeta*) a series of observations on the effect of nitro-glycerin on headaches.

The preparation generally used was the one per cent. alcoholic solution, though in a very obstinate case the ten per cent. solution was used, two drops being first given, and, after an interval of two minutes, three more. As a rule, two or three one-drop or two-drop doses of the one per cent. solution placed on the tongue at intervals of a few minutes, sufficed to arrest the headache. The conclusion arrived at was that all cases which depended entirely, or almost entirely, on a vaso-constrictor neurosis, are immediately curable by nitro-glycerin.—*Medical Age*.



DR. GEORGE N. BURWELL.

[Died May 15, 1891.]

Buffalo Medical *and* Surgical Journal

VOL. XXX.

JUNE, 1891.

No. 11.

Original Communications.

THE OPERATIVE TREATMENT OF RECTO-VAGINAL FISTULA.¹

By Dr. MAX SAENGER, Leipzig, Germany.

IN NO branch of operative gynecology is the number of methods so manifold as in the field of its plastic surgery. This may be, perhaps, explained by the present contest for supremacy between the operations of freshening and the flap-splitting methods. Indeed, one often hears that it is immaterial what method is used if success only follows. Nevertheless, that method is the best which concretely gives the best chance for primary union. But since in each instance only one operation can be selected, it becomes necessary to choose the one most fitting according to the conditions to be met. But the choice of a method for each special case, according to its special applicability, may be shown to rest often upon a paradoxical and unsafe basis. We expect more from plastic operations today than formerly—going, indeed, so far as to hope for invariable success.

Many gynecologists will agree in my experience that the eventual healing of these fistulæ is more difficult than is ordinarily supposed. When, for instance, Winckel expresses the opinion that they are more easily curable than urinary fistulæ, he must have in mind the more complicated cases of the latter condition, certainly not its more simple forms. Earlier in my experience I must confess to have had some failures in operations for recto-vaginal fistulæ, even in spite of the utmost care. The origin of the failure is clearly due to several possible causes—interference of or failure in the stitches to hold, or faulty approximation of the edges of the fistulæ. Again, the microorganisms in the rectum, or the presence of fecal matter or of flatus, may interfere with immediate union and cause suppuration. The aim of a perfect technique is, therefore, to

1. In appreciation of the honor conferred by his election to Honorary Membership of the American Association of Obstetricians and Gynecologists. Reprinted from the Transactions, Vol. III., 1890, by permission of the author.

obviate such interferences to success. The cases in which operation is required for the cure of recto-vaginal or perineal fistulæ are almost necessarily entirely of puerperal or traumatic origin. The para-rectal and para-vaginal abscesses giving rise to pus-producing fistulous channels emptying in the vagina and perineum, must be treated as *bona fide* fistulæ, either by slitting and curetting, or by the later method of cutting out the diseased tissues along their course and uniting their edges to secure primary union.

The elastic ligature may be considered obsolete. Fistulæ of the posterior vaginal wall, such as arise from pelvi-peritoneal abscesses, from ectopic pregnancy, and from suppurating cysts, particularly dermoids, and escaping into the rectum or vagina, must be classified apart from those now under consideration. The recto-vestibular variety of fistula, as also those generally found after failure of perineal plastic operations, must also be placed in a class of their own.

These preliminary observations will, perhaps, serve for the better appreciation of my special theme—to-wit, the operative treatment of typical fistulæ of the recto-vaginal septum. To these alone are the following conclusions to be applied. The operation for recto-perineal fistula, recto-laquearis, is especially to be mentioned. We now follow with a description and critique of the various methods:

1. Cauterization by chemicals; the hot iron, thermo- or galvano-cautery, either from the vagina, or the rectum, or both. As long as the fistula has fresh granulating walls, cauterization, even in relatively extensive lesions, is able to accomplish much and give fair chance of healing. Nevertheless, opportunity does not often present itself to utilize the conditions necessary for success. In chronic fistulæ with cicatricial walls, cauterization will rarely be efficacious, unless, perhaps, in very small fistulous channels. It is to be recommended, therefore, that not only the fistulæ are to be cauterized, but also the tissue surrounding their opening into the vagina, to the extent of a half or one centimeter in diameter.

2. True surgical operations. These are to be made only from the vagina or the perineum. In some few cases Simon and Demarquay have operated from the rectum in fistulæ located high up. Maurer attempted to close such fistulæ by transplantation of a rectal flap. That he met with little success is explained by my previous observations upon the causes of failure in these cases. We will see later that we possess in perineotomy a method by which we can reach a fistula of the vaginal roof from the perineum.

Trendelenburg now advocates a method similar to that followed out in the "sectio alta," by which the fistula is closed from the bladder, the patient having been put in the high pelvic position. I mention this comparatively, for while the bladder can be kept constantly drained, the same cannot be accomplished with the rectum. The true surgical operations may be divided into three classes :

- I. Methods of denudation.
- II. Methods of transplantation.
- III. Methods of flap-splitting.

I. Denudation may be either (a) from the vagina, or (b) from the perineum after previous splitting of the fistula in the perineal bridge. The vagina denudation until recently generally conformed with that followed out in the Simon method of treating vesical fistulæ.

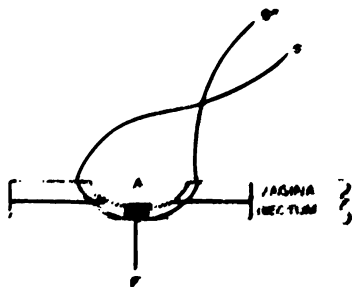
This consists in the removal of tissue along the edges of the fistula, usually a centimeter in width, while the sutures are introduced across its long diameter, both deep and superficial. (Figs. 1 and 2.)

Fig. 1.



Denudation of the fistulous edges in the vagina, with introduction of transverse sutures.

Fig. 2.



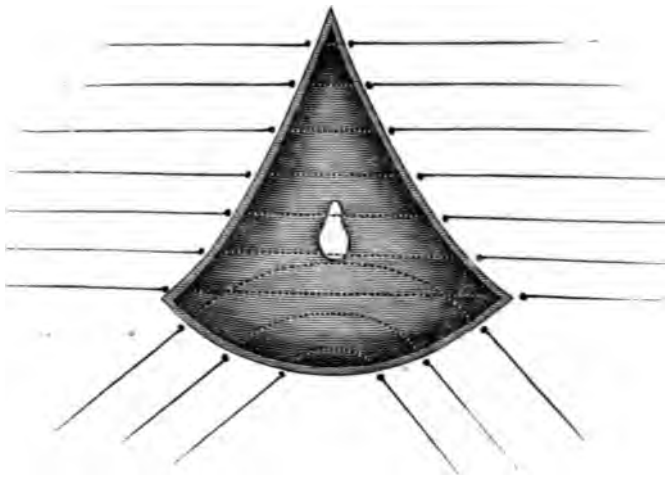
A freshened edge & suture
B. Fistula

The causes of failure in these operations have already been referred to. It is probable that in addition to such causes, carelessness in anæsthetic precautions, inevitable and non-aneæsthetic silk, or too soft catgut, must share the blame of failure.

By the use of silkworm-gut, silver wire, or even of fine anæsthetic silk, perfect results are to be expected in every case. Schunka (*Verhandlung d. Deutsch. Gesellschaft. f. Gyn. zu München, 1884*), made a notable improvement in this method; instead of freshening the edges of the fistula, he has brought it into a triangular form corresponding to that used by Hager in his method of prostatic

colporrhaphy. The fistula, therefore, lies in the center of a largely denuded surface and is closed by a larger number of stitches, which do not cross into the immediate territory of the fistula, whereby a much stronger primary union is attained. (Fig. 3.)

Fig. 3.



Triangular Denudation. (After Schauta.)

The simple denudation, as also the triangular, is not applicable in cases in which the bridge between the fistula is so narrow and thin that any further reduction of its extent will so reduce vascularity as to defeat the intent of the operation. Hitherto it has been the custom to cut through this remaining perineal bridge, and attempt to repair the injury by the triangular, butterfly-formed denudation of Hegar or Simon. These old methods were, for the most part, unsuitable to secure good results, because the point of defect usually lay high up in the recto-vaginal septum. Hence, not seldom did failure result, not only to close the original fistula, but often produced in addition others that did not before exist, from the rectum through the perineum. This, in most cases, was the fault of the method, not that of the operator.

Nevertheless some, Chrobak for instance, ("Über Mastdarm-scheidenfisteln, nebst Bemerkungen über die Perinealnaht," *Wien. med. Blätter*, 1887, Nos. 27-33,) in spite of the defective methods, have reported excellent results, probably due to their excellent technique.

It will now be seen that however this operation is done, whether by the triangular denudation or by sutures from the vagina or perineum, (Baker Brown, Winckel, T. A. Emmet, Hirschberg, and others,) it is easily surpassed, both in safety and the certainty of results, by the flap-splitting operations—to which the future must afford still greater favor.

II. The transplantation of flaps from the vagina, the rectum, and the integument in a few cases has been attempted, so far as I am able to ascertain, with either entire or partial failure. Simon in one case had a favorable result by bringing a flap from the portio vaginalis into the fistula. Rydygier, Trendelenburg, and Leroy d'Etiolles succeeded in closing a urinary fistula by bringing flaps from the posterior vaginal wall.

It thus might be possible, indeed, to close fistulæ of the posterior wall by flaps from the anterior, the operation being simply reversed.

The methods of transplantation are only to be applied when the typical operations have failed, or have from the outset been impossible on account of the location of the fistula.

III. In the last few years I have chiefly used the flap-splitting method in closing recto-vaginal fistulæ. It is the intention of the present paper to present its claims for recognition as forcibly as possible.

It is well known that the method of Lawson Tait, long since applied, was the forerunner of a new era in perineorrhaphy. My attention having been called to this method of operating, I frequently discussed it in various papers, and further improved it. Since then the interest in this method of operating has become greater both in Germany and other countries, and the principles of the operation, both by Fritsch, von Herff, Walcher, and myself, have been transferred to the domain of operations for fistulæ. It is difficult today to understand why the principles of the flap-splitting methods are not more widely understood and appreciated, especially for fistulæ of the rectum, where every millimeter of tissue is precious. I hope now to be able to convince those who are still using the older methods, of the greater advantage and superiority of the flap-splitting operation. Here two methods are to be distinguished, according as the vagina or the perineum is taken as the point of departure. Each of these again has sub-divisions :

I. Flap-splitting operations from the vagina.

(a) Fritsch (*Centralbl. f. Gyn.*, Bd. xii. 8, 804,) has invented an

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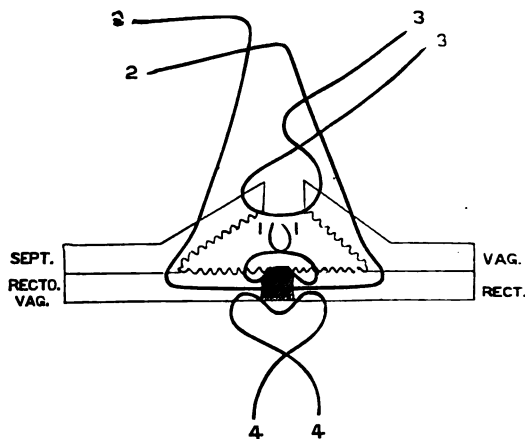
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perineal operation,¹ and so that each edge of the wound pierced twice, similar to Lembert's intestinal suture.

After clipping away the ends of the threads the vaginal flaps we closed over the sutured fistula by deep silkworm-gut and superficial silk sutures. There were, therefore, three rows of sutures: one buried and two closed from the vagina.

Fig. 8.



- 1, 1. Buried suture of the rectal surface of fistula. 2, 2. Deep vaginal sutures.
3, 3. Superficial vaginal sutures. 4, 4. Rectal supportive sutures.

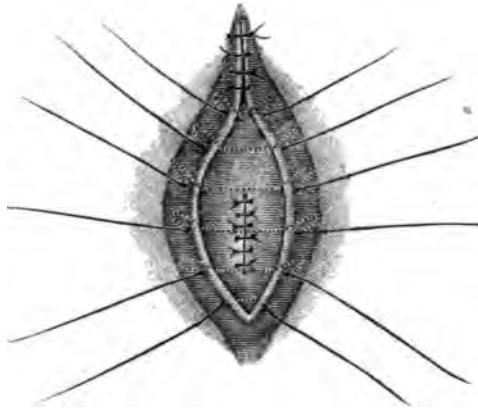
The idea now occurred to me to introduce sutures *from the rectal side*, and so bring together, over the site of the fistula, the folds of the rectal mucous membrane, by which fecal matter would be kept from interfering with the union of the flaps. The patient was accordingly placed in the Trendelenburg position—the rectum dilated and the site of the fistula exposed—after which the introduction of the sutures was easily accomplished. The mucous membrane of the bowel was stitched over the fistula without *any denudation whatever*, by the simple linear perforation of the tissues on either side of the fistula, and the subsequent knotting of the sutures.

The fistula was thus covered over. The ends of the sutures were then cut off close. I am accustomed in all plastic operations to close the wound so carefully and exactly that its edges can scarcely be determined. By the application of iodoform and packing with iodoform gauze twice or thrice daily in the vulva—

1. *Centralbl. für Gynäkol.*, Bd. x. S. 49.

after each catheterization—the wound remained dry and healed perfectly. The patient took twice daily, for six days, twenty drops tr. opii. The bowels were moved every two days. The wound was fully healed at the end of sixteen days.

Fig 9.



Closure of the vaginal incision by deep sutures, seen from above.

The rectal stitches had not been seen up to this time, but in all probability were cast off later. I ask whether a more logical or simple solution of the requirement presented than the above-described flap operation? I wish to call especial attention here to my method of applying the sutures.

1. *I lay the greatest stress upon the suture introduced and buried beneath the flaps.* The simple suture is not here practicable since the stitch holes easily lead into the rectum and do not inclose sufficient tissue. Only when the fistula is exactly closed will the vaginal flaps, like the side doors of an altar shrine, exactly approximate in the middle line, thus restoring the natural form. I must also say¹ that *fine aseptic silk in sufficient quantity can be buried in the wound*, a fact of great importance in operations for the cure of fistulæ. The silk occupies less space, is thinner, does not swell like catgut, and yet is certainly absorbed after a long time, which, again, is an important consideration. The above-described *protective intestinal suture* has only been used by me in one case. I

1. I use only the Chinese silk, never the plaited silk, whose interstices are pockets for microbes. I treat my silk by boiling in a five per cent. solution of carbolic acid, and preserve it in a sublimate solution of 1:500.

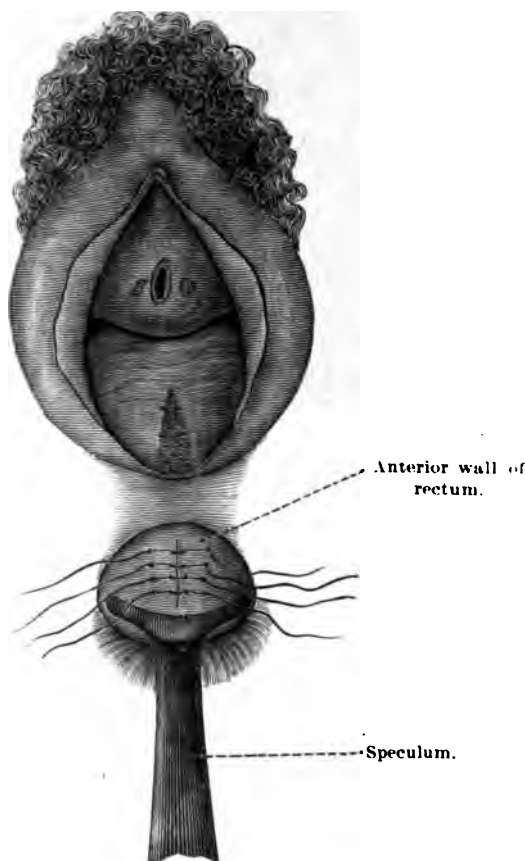
believe it to be, however, so rational that I expect to use it in all future cases.

2. *Methods of operation for intestinal fistulæ by flap-splitting from the perineum.*

a. Without sagittal splitting of the perineo-vaginal bridge.

b. By previous splitting of the same. In the first division, a,

Fig. 10.



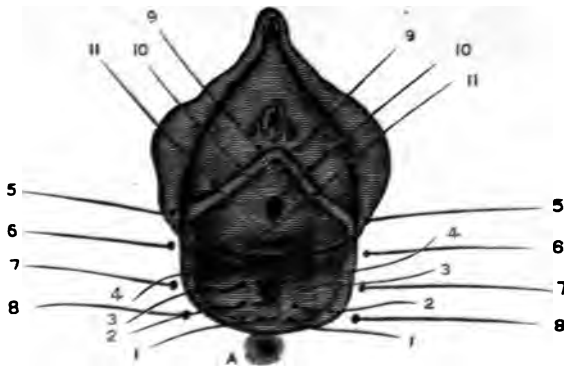
Vaginal incision closed. Introduction of rectal sutures.

we proceed exactly as in flap perineorrhaphy for incomplete rupture of the perineum (second and third grades), in which, according to the operator's judgment, the incision must be either $\sqcup$, $\vee$ or $\smile$ -shaped, by which the vaginal flaps separated from

the rectum are formed corresponding to my earlier description. V. Samml. klin. Vorträge von Volkmann, No. 301; *Centralbl. f. Gynäkol.*, 1889, No. 47; Verhandlung d. deutsch. Gesel. f. Gyn. in Freiburg, 1889. Compare also the paper of Werder, in the Transactions of the American Association of Obstetricians and Gynecologists, 1889.

It is evident, therefore, that both the bowel and the flaps are perforated by the fistula. In two cases of smaller fistulæ I paid no attention to these openings and performed the transverse perineal operation, taking care, nevertheless, that one of the silver sutures was passed behind the rectal fistula. In one case success followed, but in the second I found later a small recto-perineal fistula, which, since it was located close to the anus, and only at times allowed the

Fig. 11.



Simple perineal flap. A. Anus. 1, 2, 3, 4. Buried Lauenstein's sutures for closure of the rectal fistula. 5, 6, 7, 8. Perineal sutures. 9, 10, 11. Vaginal sutures to close openings in the vaginal flaps.

escape of thin feces, had never been noticed by the patient. The simple splitting of the fistulous tract into the rectum would result in cure, which this method is especially legitimate for recto-perineal fistulæ. Moreover, I close also here *recto-perineal fistulæ* from the wound out by several buried sutures, à la Lembert-Lauenstein. The perforation in the vaginal flaps can be eliminated very easily by fine silk sutures. Perfect union results. (*Vide* Fig 11.) This extremely simple method can be applied equally well both to small and deep-seated fistulæ as well as to vestibular fistulæ in relatively thick perineæ with a functionally perfect sphincter. Under *b* the fistula is larger and situated higher, and consists, in addition, of only a skin perineal fragment, with an open, relaxed

anus and an insufficient sphincter, from all of which *the necessity of splitting the perineal bridge is evident.* With the exception of flap

Fig. 12.



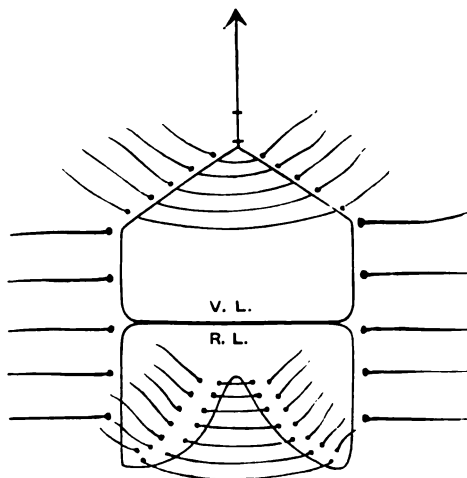
Fistula with only perineal fragment remaining.

Fig. 13.



Perineo-vaginal bridge torn through.
R. P. Posterior wall of rectum.

Fig. 14.

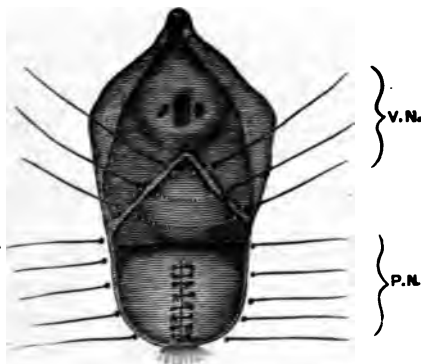


Diagrammatic representation of operation. R. L. Rectal flaps with sutures of Lauenstein. V. L. Vaginal flaps.

perineorrhaphy this is entirely analogous to complete tear of the perineum into the rectum; if this does not extend very high, the

typical perineal operation with deep perineal sutures of silver wire and superficial vaginal, with several external rectal stitches of fine silk, will suffice. If the defect extends higher up to the greater calibre of the bowel, the tear must be closed by buried silk sutures

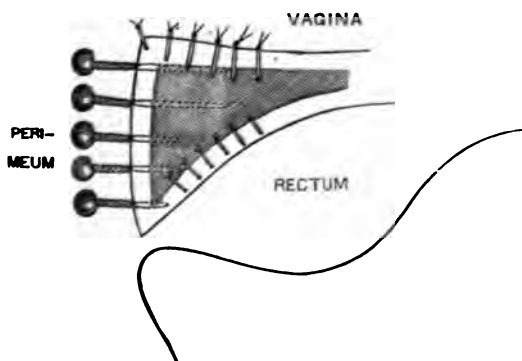
Fig. 15.



Anterior rectal wall closed by Lauenstein's deep sutures. P. N. Perineal sutures.
V. N. Vaginal sutures.

after the manner of Lauenstein—from the wound outward. In other cases there is nothing to hinder the primary closing of the intestinal tear. (*Vide* Figs. 12 to 15.) In this manner perfect

Fig. 16.



Position of sutures after completed operation. Ends of the silver-wire sutures protected by shot.

union results, while by the old methods, by the more difficult triangular denudation, the results were never certain. In twenty cases of flap-splitting perineorrhaphy in complete tears of the perineum,

with and without rectal fistula, I have never had to do a secondary operation. In those horrible cases, fortunately seldom met with, of *multiple fistulæ of the bladder and rectum toward the vagina*, it is evident that no hard and fast rules for operation can be laid down. Under such circumstances the experience, ingenuity, and patience of the operator must determine the measure of his success.

Also in high-lying *fistulæ of the posterior vaginal roof*, the same may be said. Up to the present time our operative resources were limited, but now it is to be hoped that by the present advanced technique a great change may be wrought. I myself have had but *one* such puzzling case during five years. An enormous pelvi-peritoneal exudate concomitantly penetrated both rectum and vagina.

There remained in the posterior vaginal roof a fistulous opening the size of the thumb nail, surrounded by a hard cicatricial margin, communicating with the rectum. Above Douglas's cul-de-sac the vagina was roofed over by fibrous masses. The entire contents of the bowel were discharged through the vagina.

Before the patient came into my hands she had been treated several years. Her general condition was poor, and she suffered from chronic nephritis. I first attempted to tampon the fistula by iodoform gauze and afterward by inserting a colpeurynter into the vagina with a view of softening the cicatricial tissue, as well as to determine whether the opening could be closed by any procedure under the control of the patient herself. This was in a measure successful. The patient, however, suffered intense abdominal pain, and became feverish each time the colpeurynter was allowed to remain *in situ* for more than a day. A direct plastic operation upon the fistula was out of the question, both on account of its high location and also on account of the cicatricial nature of its edges. All previous attempts in that direction had met with no success, and for that reason I finally decided to perform kolpo-kleisis. The patient died of uremia ten days after the operation.

Winckel observed spontaneous closure of a fistula situated at the cervico-vaginal junction posterior by adhesions of the border of the small intestine. In order to understand this method of healing, one must remember that these fistulæ usually extend into Douglas's pouch, and that ordinarily it is taken up by cicatricial tissue or exudates around the perforation, so that it is rare for a case to occur in which the small intestine can come into relation with the fistula.

In a further communication of Chrobak's, a fistula was closed by the adhesions of a retroflexed uterus, but this manner of closure is so rare that it cannot be depended upon; nevertheless the case suggests the method to be followed out when operation is resorted to,—to-wit, drawing down the uterus to fill up the fistulous opening; and when the organ is already retroverted, its suture in this position can offer no great difficulty. When the fistula is the result of the breaking through of a suppurating ectopic sac or of a dermoid cyst, these growths should be removed by abdominal section, and their sacs stitched to the external abdominal opening. This is rendered more easy by the high pelvic position during operation. In order to prevent failure of closure by slipping of the stitches, it is necessary to make use of intra-abdominal tampons of gauze through the abdominal incision. Another method promises much for the future,—to-wit, perineotomy (*vide* my article, *Archiv. f. Gyn.*, Vol. xxxvii.); it is done in the following manner: First there is transverse splitting of the perineum, with complete separation of the vagina from the rectum if it is necessary, followed by partial cutting through of the levator ani. This is followed by the closure of the opening into the vagina through the drawing down of the portio vaginalis. Subsequently the vaginal wound is sutured, the whole to be followed by after-treatment with iodoform gauze.

Latterly my observations have led me to operate not only for fistulae of the posterior vaginal wall by transverse perineotomy, but also in those lying high in the rectum. In my paper cited above I have mentioned a case in which the matter expelled from the rectum was pus mingled with hair, from which I concluded that a dermoid had suppurated into the rectum. The patient came into my hands after a further discharge of hair had taken place. A careful examination corroborated my supposition. The fistula was of roseate shape, drawn inward, high up in the posterior vaginal roof on the anterior border of the rectum. I determined to remove the cyst-wall by perineotomy. After splitting of the pelvic floor from one ischiatic protuberance to the other, the vagina in a few minutes was separated from the rectum, and a wound was present into which I could easily insert my double fist, in spite of the fact that the levator ani was not cut into but only pushed aside. I now met remarkably hard tumorous masses in the subperitoneal pelvic space, so that further advance was impossible. After unsuccessful attempts to enter, the thin anterior wall of the rectum tore through about two centimeters in length. The tear was immedi-

ately closed by numerous fine stitches. This closure was found to be water-tight by repeated filling of the rectum with water. The recto-vaginal space was loosely packed with iodoform gauze and the perineal wound reduced by several deep silver sutures. The patient was kept under opium for six days. When castor oil was given she had thin evacuations through the perineal wound. This was repeated at intervals of five days, and numerous discharges followed during this period through the fistulous opening. After about five weeks the whole wound was entirely cicatrized without any remnant of the perineal fistula. From the circumstance that not a single silk suture was cast off, one can well come to the conclusion that only a small opening had been formed in the line of the suture, and that this afterward was closed by granulation and the reunion of the vagina and rectum.

Certain it is that the conditions here described are identical with those found when a perineotomy is done by entire separation of the vagina from the rectum. By this means it is practicable to reach the upper edge of the fistulous opening—and I am convinced that this is possible in most cases—and accordingly it must be very easy to close the wound from the surface presenting. The reason that the reconstructed vagina affords a better covering for the rectum, so that in case suture of the latter should partially give way, there would only remain a recto-perineal fistula, whose closure could be expected by granulation and cicatricial contraction.

With this I close my communication, with the consciousness that I have advanced many ideas which are suggestive of operative procedure on new lines. This remark I would not venture did I not believe that the point of view in the most advanced and latest discussions upon the subject, as in Pozzi's treatise upon gynecology, as well as that of Edward W. Jenks, in the *American System of Gynecology*, Vol. ii., justifies the expression.

REFLEX DYSPEPSIA.—Many troublesome dyspepsias in females are due to reflex action, and are associated either with menorrhagia, or with an irritable ovary; just as the vomiting of early pregnancy is due to an allied condition of the organs of generation. Counter-irritation over the tender ovary, with sulphate of magnesia as a purgative, and bromides to quiet the nervous system, frequently succeeds even in rebellious cases.—*Med. World*.

NOTES ON AN EPIDEMIC OF MEASLES.

By FREDERICK STANBRO, M. D., Springville, N. Y.

I WRITE these notes, not because Rubeola is such a rare disease, but in order to put on record certain irregularities observed during this epidemic, which, I trust, will be of interest, and may be of service, to the general practitioner.

Beginning in the last week of January, 1891, and continuing seven weeks, there has been a severe epidemic of measles in this region. No such epidemic has been observed here in fifteen years, both as regards severity, numbers attacked, and small mortality.

All unprotected persons have been attacked, and six authentic cases I have observed which have suffered a second attack. These six persons had measles before, under the observation and care of physicians in this vicinity, and there can be no mistake. Three had mild attacks from three to ten years ago, and three had severe attacks seven years ago. Each of these six cases had measles under my observation this season, and all had it in the severest form, the prodromes, rash, catarrhal symptoms, all being typical. I lay special stress on these cases, as there seems to be some doubt on this subject among medical minds, as well as among the laity.

Of the 110 cases observed and treated, I find sixty males and fifty females; of these, twenty-four were adults and six were infants under the age of nine months.

The period of incubation was about nine days, but the eruptive stage was wonderfully delayed, the rash not appearing until a week had passed, in the majority of cases, and in two cases of young ladies, aged respectively sixteen and eighteen years, the rash did not appear until nine and fourteen days had passed, during which time they were confined to the bed with the usual symptoms of the prodromal stage—viz., Malaise, headache, bone-ache, slight fever, etc.

During this period of "invasion" the patients were all ill and suffered from aching bones and muscles, constipation, nausea, headache, and other symptoms similar to those of "la grippe" of last year. A slight rise of temperature would be observed, and for about three days before the appearance of the rash the coryzal symptoms and the peculiar hacking cough would appear.

The temperature was extremely high as a rule, being 103° F. in most of the cases, 104° F. in twenty cases, 105° F. in ten cases, and 105³⁰° F. in three cases.

The pulse was correspondingly high, running from 120 to 160

in the severest cases. Slight congestion of kidneys occurred in most of the cases during the few days before the appearance of the rash, and delirium was a common symptom.

In a few cases, earache was so severe as to call for local treatment.

Sequelæ.—Catarrhal pneumonia attacked one patient weakened by the measles, and whooping cough occurred in nine cases. The severe coughing caused a direct inguinal hernia in a young man about sixteen years of age. Otherwise all the cases recovered, not one of the 110 dying, and only one is now under my observation.

Treatment.—The simpler cases demanded no treatment, except light diet and some calming expectorant.

The more severe cases were kept in warm, darkened rooms on strictly milk diet. High fever was relieved or controlled by tr. aconite, quinine and tepid baths. Constipation relieved only by warmenemata. Dysuria, or suppression of urine, by spirits of nitre and other simple diuretics.

The conjunctivitis required nothing but warm lotions, and the general pruritus was relieved by inunctions of vaseline or lard.

Only a few required any tonic treatment during convalescence.

Society Proceedings.

HARLEM MEDICAL ASSOCIATION.

Reported by A. H. LEARY, M. D., Secretary.

STATED Meeting, held April 1, 1891.

The President, Dr. E. FRIDENBERG, in the chair.

Dr. W. F. MARTIN presented the following

REPORT OF TWO CASES OF CROUP.

CASE I.—Girl, *æt.* four and a half years; previously in good health. taken suddenly. January 24, 1891, with dyspnea, rapid and labored breathing, slight sore throat. Examination showed moderate congestion and swelling of the tonsils and pharynx, chest filled with sibilant and sonorous rhonchi; prolonged, loud, pitched breathing. No moist sounds. Temperature not taken. The diagnosis of bronchitis with unusual predominance of spasmodic elements was made, and favorable prognosis given. Afternoon of same day, as I could not be reached and child becoming worse, half a dozen other doctors were called in, all of whom pronounced the case extremely critical, most calling it one

of membranous croup, or diphtheria. One of these physicians took temperature per rectum at this time, and found it 103½. I reached house in evening, found dyspnea pronounced, both inspiratory and expiratory, stridulous breathing, hoarse laryngeal cough. No rhonchi in lungs; no membrane in pharynx or on tonsils; no enlarged cervical lymphatic glands. Temperature, 102, per mouth. Child had been vomited, with some relief. Steam inhalations given with additional relief, and small continued doses of antimony and ipecac (aa. gr. ʒ½—q ½ h.) ordered. Child was watched for several hours, and kept in steam atmosphere; benefit quite pronounced, and continued for rest of night. For next three days child continued aphonic with laryngeal cough, having every day from two to three severe attacks of dyspnea, lasting from fifteen minutes to half an hour, otherwise breathing easily. Some of these attacks were relieved by direct inhalation of vapor, others by vomiting and hot external applications, others by nothing additional to that of which was continually kept up, namely, a moist atmosphere, impregnated with eucalyptol and carbolic acid. During this time temperature ranged about 100. On the morning of the 28th, four days after onset, child had a severe attack of dyspnea, which failed to yield to all means previously successful, and which became steadily worse,—so much so, that intubation was strongly urged, and after much hesitation on the parents' part, it was finally done at one P. M., at a time when the dyspnea was extreme. During the morning the temperature, per rectum, was taken and found to be normal. Relief was immediate and lasting. Temperature rose in P. M. to 102½. Next day, temperature normal. Lungs, clear; tonsils and pharynx continued clear; no enlargement of lymphatic glands of neck; cough brought up only mucous expectoration. On the third day following intubation tube was coughed up. Child made a rapid recovery.

Temperature reached highest point on day of onset of disease, namely, in the P. M. 103½, per rectum. On the fourth day, when intubation was done, it was normal per rectum previous to intubation. Pulse varied with temperature and with attacks of dyspnea, from 120 to 160. Respirations were slightly accelerated ordinarily and ran up to fifty and sixty during attacks of dyspnea. There were distinct attacks of labored breathing, occurring about two to three times in twenty-four hours, and between these attacks quiet respirations were present.

In above case at no time was membrane to be found on tonsils, soft palate, uvula or pharynx. At no time were any enlarged lymphatic glands to be felt in the neck.

Query: Was the case one of diphtheria of the larynx, simple catarrh of the larynx, associated with marked spasm, or something else?

As a supplement to above case, I would mention one in which symptoms were somewhat similar, but of which I have not full details :

CASE II.—The case was one in child some two years older than above. in which very pronounced dyspnea recurred nightly for four nights, with quiet and fairly easy breathing during day. No membrane in throat, no glandular enlargement, and no fever, at least none on fourth day. On the fifth night, dyspnea, etc., became so extreme that, failing in the use of antispasmodic and relaxing remedies of all kinds, intubation was performed by Dr. L. Emmett Holt of this city. Immediate relief ensued. Tube was extracted three or four days later, and no further trouble, save that of aphonia, which continued for some weeks afterward.

CASE III.—In contrast to above cases was a case of pronounced diphtheria from the start. Child, male, seven and a half years old : previous good health. When first seen had patch of grayish membrane on right tonsil, enlarged lymphatic glands on right side of neck. Temperature, 100. Had been complaining of slight sore throat for two days previous. Child partially aphonic. Next day, membrane had spread to anterior pillar of fauces and soft palate ; aphonia. Complete dyspnea had set in and steadily increased ; glands increased in size. Temperature had risen to 102. Very transient improvement brought about by emetics. Steam inhalations constantly kept up from the beginning. Dyspnea became excessive, both inspiratory and expiratory. Stridor marked, no vesicular murmur, and intubation finally done, with marked relief. Child coughed up tube three days after, and with it coughed up a cast of upper part of trachea. Child, after this, made an uninterrupted recovery. Main points in this case, *in contrast* with preceding, are : (1.) Membrane on tonsil and spreading, and membrane coughed up. (2.) Constant low temperature, but slowly increasing from 100 to 102, and after intubation reaching 105. (3.) Lymphatic glands of neck enlarged and tender. (4.) Progressive dyspnea, with no marked remissions.

DISCUSSION ON DR. MARTIN'S CASES.

Dr. E. MAYER: I had an attack of acute laryngitis with a dry cough and a feeling of impending suffocation. The larynx being examined showed nothing abnormal beyond extreme redness. Hot steam inhalations and muriate of ammonia effected a cure. I would suggest as a diagnosis in Dr. Martin's first case that it was one of edema of the larynx. Dr. Schreider's tubes are found to be very beneficial in edema of the larynx. They are made of rubber of different sizes and of the length of a urethral catheter. These are allowed to remain in the larynx a varied length of time.

No irritation is produced by this intubation. I use the mirror to introduce the Dwyer or Schreider tube. I had a case of laryngeal stenosis, due to diphtheria, and introduced Dwyer's tube to great advantage. After the fifth day I proceeded to remove it by the extraction, but failed after several attempts. The child was being held by a stranger and was much frightened. It immediately went into convulsions and died. I can give no satisfactory explanation of this result. There has been a good deal said against the Dwyer extractor—some operators refusing to use it, depending on emetics and external manipulation.

Dr. VAN SANTVOORD: It is my opinion that Dr. Martin's first case was one of catarrh of the larynx. This is contrary to my experience, however, in the greater majority of cases. I have examined as many as a dozen cases, post mortem, and found membrane in the larynx, but none was observed in the pharynx during life. I have seen three cases of intubation during measles where it was supposed only catarrh or edema existed, as no membrane could be seen in the pharynx. But autopsy proved membrane to be present in the larynx. These cases are important, because they should be isolated with greater care. After intubation with Dwyer's tube, much benefit is derived by feeding the child with the head held lower than the body.

Dr. STANTON: Does Dr. Mayer use the mirror to aid in removing the tube with the extractor?

Dr. MAYER: Yes.

Dr. STANTON: I do not see how the epiglottis can be managed so as to use the mirror, as this organ is so often swollen and covered with membrane. Every practitioner has his own method in introducing the tube. I always find the epiglottis with the index finger, and use that as a land mark. I have operated on fifty cases. I am not in favor of carrying the tube so far posteriorly in the larynx as advocated by Dr. Martin—it may scrape off the membrane and close over the end of the tube. I have not heard of the objections against the extractor mentioned by Dr. Mayer. Formerly I used the old style extractor which permitted the jaws to be widely dilated; with this a singular accident happened to me. I tried twice to extract a tube, but failed. The character of the breathing immediately changed and gave the impression that the tube had been pushed below the larynx. Dr. Dwyer saw the case and very rapidly and skilfully removed the tube; another was inserted and the child ultimately recovered.

Dr. GEO. H. COCKS: I believe it best always to warn the parents to isolate cases if the symptoms indicate laryngeal stenosis, and these cases should be treated as if they were diphtheria.

Dr. HEINEMAN: The condition of the urine will often aid in the diagnosis between catarrhal and diphtheritic laryngitis.

Dr. E. L. COCKS: I always have the child's arms placed beneath the night dress, which is tightly buttoned, and the limbs of the child held firmly between those of the father holding the child. Thus the child is under perfect control. The head should be thrown far back. The epiglottis should always be felt as a guide. I have had eighteen successful cases in forty-one operations. In some cases I have fed the patient through a soft catheter placed through the nostril. Medicines were thus introduced also. I would like to inquire of Dr. Mayer if he invariably uses the mirror to introduce the O'Dwyer tubes?

Dr. MAYER: No. Only in children who are six or seven years old or older.

Dr. STANTON: The best method of feeding these patients while wearing a laryngeal tube is to lower the head. Even water or medicines should be thus given. I had two patients who complained of pain in the ear after swallowing in this position.

Dr. MARTIN: I have heard of some objections to the use of the extractor. The tube can be extracted in an emergency by placing the end of the thumb under the lower point of the tube and pressing upward while the tip of the index finger is in the mouth over the upper end of the tube.

REPORTS OF CASES.

Dr. FRANKLIN: I have a case of severe vomiting of pregnancy. The patient is a primipara, three months pregnant. The emesis has existed some seven weeks; she has been under my care ten days. A few drops of water will often excite vomiting. Even talking will frequently bring on an attack. The uterus is slightly retroflexed and retroverted as well as somewhat prolapsed. I have endeavored to keep the organ in position with cotton, but the vomiting has not been relieved by any kind of medication that I have used.

Dr. MAYER: I would suggest the use of ice to the spine—it has been beneficial in my practice.

Dr. STANTON : In three severe cases, which came under my care and which did not yield to any internal treatment, I stretched the os. One case was relieved, the other two were not.

Dr. E. L. COCKS : I have used cocaine internally as well as chloroform to good effect. That is a curious condition in which the husband vomits during the wife's pregnancy. I was the victim of this condition during the first three months of my wife's first pregnancy. No form of treatment was of value to check the vomiting. Nearly every morning for three months I vomited, but my wife was not sick at all.

Dr. M. C. O'BRIEN : I have one case to relate which will substantiate Dr. Cocks' condition. My patient was accustomed to indulge freely in alcohol, and I thought his vomiting proceeded from a chronic gastritis. I washed out his stomach frequently for three months, when his vomiting ceased. Internal treatment did no good. One year later the same condition returned with the same history. Twelve months later the vomiting occurred again every morning. I now learned that his wife was pregnant and had been pregnant during the two previous attacks he had had ; no treatment was instituted, and he recovered when his wife had finished the three months of gestation. The wife had no nausea or vomiting at all and was perfectly healthy.

Dr. VAN SANTVOORD : One very severe case came under my notice which finally ended in abortion at the sixth month. I did not distend the os, but did try nearly everything known. Rectal injections of bromide and chloral did the most good.

Dr. MARTIN : I saw a case in the practice of Dr. Wyle that was very severe and had not yielded to any medication. The external os was dilated nearly one and one-half inches, with very satisfactory results, and the woman went on to full term.

Dr. FRIDENBERG : Some years ago a woman pregnant the fourth time came under my care who vomited excessively. No treatment was of avail. Consultation was held with Dr. McLean, and under his observation and guidance the external os was dilated ; unfortunately miscarriage resulted.

THE CHICAGO MEDICAL SOCIETY has come out with an official organ. We trust that the music furnished by the organ-grinder will receive Keener appreciation than is generally given such efforts.—*Medical Mirror*.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON
ORTHOPEDIC SURGERY.*Stated Meeting, February 20, 1891.*

SAMUEL KETCH, M. D., Chairman.

Dr. ROYAL WHITMAN exhibited a case of unusually severe genu valgum, and one of teno-synovitis of the long extensors of the toes. As in the latter case there was a tuberculous ostitis of the elbow, he considered that the lesion of the foot had a similar origin.

Dr. V. P. GIBNEY said that in a somewhat similar case, where the tuberculous nature of the lesion was proved by microscopical examination, he had moved the tendons freely, divided the annular ligament, and scraped away the diseased tissue.

Dr. JOHN RIDLON exhibited a man, twenty-one years of age, who, as a result of an injury thirteen years before, was unable to supinate the wrist without causing a backward dislocation of the ulna. The apparatus which he had applied consisted of a leather case, with a metal side, which had been fitted so as to accurately grasp the ulna, by molding it over a plaster cast. He expected that after the patient had worn this apparatus constantly for two or three years, the dislocation would be cured.

Dr. A. M. PHELPS read a paper upon

EXCISION OF THE KNEE JOINT.

Dr. A. B. JUDSON recognized the conservatism of the treatment advocated by Dr. Phelps, whose paper clearly demonstrated the superiority of excision over amputation; but he thought the time had come for the better conservatism that is found in purely orthopedic treatment. Many of the patients would have made good recoveries if excision had given place to mechanical treatment, which puts an operation out of the question when employed from the beginning of the affection.

Dr. THOMAS H. MANLEY raised the question as to whether a more useful limb would not often result from placing it in a more or less flexed position.

Dr. W. R. TOWNSEND said that the worst results he had seen from excision of the knee had been in cases where the straight position of the limb had not been maintained. Such a faulty position was constantly aggravated by the weight of the body.

Dr. RIDLON said that in spite of the excellent results reported in the paper, he was still of the opinion that this operation upon growing children was wholly unjustifiable, and he was convinced that cases which cannot be cured mechanically—viz., those in which there is an extensive osteo-myelitis, were beyond the reach of anything short of amputation. The exceptionally good results obtained by the author, and a few other surgeons, did not argue against the soundness of the general teaching, that this operation should not be advised for such children.

THE PRESIDENT remarked that, as a rule, orthopedic surgeons were confronted with knee-joint disease in growing children, and the cases mentioned in the paper must have been instances of neglect or of improper treatment.

Dr. PHELPS, in closing the discussion on this paper, said that it might be that the cases had not been properly treated, but some of them had been under the care of good orthopedic surgeons, and he had himself treated some of them; but he must admit that he could not cure many of these cases by mechanical means. He had not yet had an opportunity of dissecting the parts and actually seeing the organized blood clot, but when a thin shell of bone after an operation becomes strong enough to sustain the weight of one hundred and eighty pounds or more, he thought it reasonable to believe that this great increase in strength was due to something more than mere blood clot. It was true that the majority of cases mentioned in this paper were adults, but many of the operations were performed upon children under twelve years of age, and some of his best results had been between the ages of ten and fourteen years. He urged the adoption of this operation in children not under ten years of age, who were suffering from extensive bone disease, and he believed that the results so obtained were both quicker and better, and often saved the patients from amputation. A perusal of German literature would show that his results were not exceptional, and were similar to those obtained by a number of foreign operators.

Dr. SAMUEL LLOYD read a paper on

LAMINECTOMY FOR POTTS'S DISEASE.

In introducing this subject, he took exception to the terms in common use in speaking of the removal of the posterior arches of the vertebræ, and especially to laminectomy, which was a hybrid

term, made up of a Latin and Greek word. He proposed to coin a new word, made from the Greek word meaning a lamina or plate, and another Greek word meaning to remove or cut away. He had collected the histories of thirty-nine cases of operation for Pott's disease.

In cases where abscesses were present, he said it was a comparatively safe procedure to explore the bodies of the vertebrae on their anterior surface, because the approach to the diseased foci was rendered easy by the abscess track, which had already pushed the intervening structures out of the way, and in these cases he advocated exploring the cavity with a view to locating the bony disease and eradicating it if possible. The cases he had tabulated showed that the mortality in cases of lamnectomy, as in ordinary cases of Pott's disease, was greater in adults than in children—57 per cent. in the former, and 10 per cent. in the latter. In only twenty-seven cases was the region involved in the disease stated, and of these, twenty-three were dorsal, which, while not affording sufficient data for an authoritative statement of the effect of the region upon the mortality, still bore out the statement made in a former paper on Lamnectomy for Traumatism of the Spine, that the higher the lesion the greater the mortality. The time of the operation after the onset of the disease varied from four months to seven years. These statistics did not show that any time was better than another for operation, and it was impossible to definitely settle upon any time when, as a rule, operation should be undertaken. No surgeon would interfere in any case in which there were other tubercular affections of any extent, complicating the cord lesion. Macewen's statement that marked hectic was a contra-indication to operation, he considered fallacious. The operation should not be undertaken when there was any chance of recovery, but cases where the chances of recovery without operation were very slight, where continued mechanical treatment yielding little or no result, and where at any moment an extension of the lesion might render the patient hopeless, if it did not destroy his life, had better be operated upon. In cases which showed only progression of the disease in spite of all care, and where an arrested degeneration was set up again, threatening the integrity of the cord, operation should be undertaken early. In performing the operation, he preferred to make a single incision, cutting the spine away from the arch, and leaving them attached to one of the flaps, because this method occupied less time, caused less hemorrhage, and did not interfere with the inter-spinous ligaments.

FIBRO-SARCOMA OF THE FOOT.

Dr. GIBNEY presented a foot which had been removed a few days before from a lady, twenty-eight years of age, who, as a result of bruising the foot against a twig, had suffered pain in the sole for seven years. She had been treated by various appliances, and once by incision, but with negative result. When she came under the speaker's care, eighteen months ago, there was aggravated flat-foot, and a fulness in the sole, which was thought to be due to the cicatricial tissue following the exploratory incision. Apparatus gave only temporary relief, and after consulting with Dr. W. T. Bull, an incision was made along the inner side of the foot, when considerable gelatinous material, and some broken-down bone from the vicinity of the cuboid, were evacuated. Three well-known pathologists in this city examined this tissue, and pronounced it a case of fibro-sarcoma. Subsequently, some more of the tissue was sent to one of these gentlemen, who, from the microscopical appearances of the granulation tissue, pronounced it tuberculosis. On laying the foot open, the bone was found to be fairly healthy. The case was of interest on account of its long duration and the pathological findings.

Dr. GIBNEY also referred to a case of long-standing hip-joint disease occurring in a girl, twelve years of age, who, as a result of the profuse suppuration, developed amyloid disease of the liver, spleen, and kidneys. As the pathologist, Dr. Tuttle, had found in the cheesy matter removed from a small excavation in one of the acetabula, almost a pure culture of tubercle bacilli, he thought it might be interesting to the members to examine the specimen under the microscope.

Stated Meeting, March 20, 1891.

SAMUEL KETCH, M. D., *Chairman.*

A CASE OF LATERAL CURVATURE.

Dr. A. B. JUDSON presented a patient, a girl of eleven years, in whom there was marked lateral curvature of the spine, although the line of the spinous processes was straight. The curvature in this case was confined to the bodies of the vertebræ, which were displaced toward the left with the usual signs of rotation of the anterior portion of the vertebral column toward the left. The left

scapula was raised, and its posterior border projected sharply backward, an obliquity best seen when the shoulders were observed from above. Stooping developed prominence of the ribs on the left side. Palpation showed the diameter of the chest from the right mammary line to the angles of the left ribs, larger than the corresponding dimension of the other side. The case illustrated the important clinical fact that the gravity of lateral curvature is not to be measured by the curve seen in the spinous processes, but rather by recognizing the amount of rotation. The patient had been under observation two weeks, and the deformity was first noticed by the mother last Summer.

Dr. H. L. TAYLOR said that after the child had become tired by standing in one position, there seemed to be a slight deviation of the spinous processes, and lateral flexion in the dorsal region seemed a little more restricted towards the left.

Dr. JUDSON replied that it was common for the degree of deformity to vary with rest and fatigue.

TRAUMATIC SEPARATION OF THE RIGHT PARIETAL AND OCCIPITAL BONES.

Dr. T. HALSTED MYERS presented a boy, five months old, who had presented nothing abnormal until two months before, when he had fallen on his head. The injury was quickly followed by great swelling, which gradually diminished. There was no paralysis, and no mental change. Examination showed a cleft in the region of the right half of the lambdoid suture, one inch wide and four inches long, through which a fluctuating mass protruded, probably the membranes distended with cerebro-spinal fluid. It became tense as the child cried, transmitted the cerebral impulse, and on pressure, disappeared almost entirely, with corresponding increased prominence of the anterior fontanelle. The posterior border of the parietal bone seemed also to have suffered a green-stick fracture, one-third of an inch from the edge of the fissure.

ADJUSTED LOCOMOTION IN THE TREATMENT OF THE RECOVERING STAGE OF HIP-JOINT DISEASE.

Dr. HENRY LING TAYLOR presented a paper on this subject. He said that the tendency of inflammations of the hip-joint was towards recovery, if favorable conditions were provided. In the stage of acute and progressive inflammation, the treatment by

position and counter-extension in the line of deformity, counteract muscular spasm, and protect the joint, and when combined for a short time with recumbency, usually afforded prompt relief to the urgent symptoms, and if persisted in, and modified to meet the varying requirements of the case, ushered in the stage of repair and recovery.

The case of a boy, six and a half years old, who had suffered from hip disease for a year and a half, and had worn a short splint for nine months, was cited to illustrate the prompt relief from properly applied extension, which caused cessation from night cries at once, and within a week, improved the appetite, appearance, weight, and deformity, although he had been rapidly losing ground for several months.

The later stages of these cases in their progress towards recovery, present just as definite though different indications for treatment. As pointed out by Dr. C. Fayette Taylor some twenty years ago, the patient is ready for the motions of walking before he is able to bear weight on the joint. It is not usually for the patient's interest to allow him to walk as soon as active symptoms have disappeared, nor to keep his leg suspended passively, or in a stiff splint, for too long a period. His recently diseased and disused joint and its appendages should be trained and developed, and the reparative process stimulated by the systematic and orderly employment of those elements of locomotion that may be made beneficial, while harmful elements are eliminated. In most cases, this can be conveniently done by the use of the jointed supporting splint, or Dows', which takes the weight of the body upon a perineal strap, but allows the patient free motion at the hip, knee, and ankle. In those recovering cases which present a strong tendency to adduction of the thigh, this may be combated by the elimination of adduction in locomotion, and in all positions, by the use of the perineal crutch bearing in the opposite groin, as described to the Section two years ago. The point is to let the patient have the benefit of the local and general tonic effect of walking, without its harmful pressure and strain at a comparatively early period in the treatment, and to adapt locomotion at all times to the needs of each particular patient. It is possible by mechanical means of doing this satisfactorily. Patients are so comfortable, and as a rule, progress so satisfactorily under his treatment, that there need be little temptation to discharge them before a cure is accomplished, even if the supporting apparatus is worn for years. Some of the most

satisfactory ultimate results have been after the longest periods of treatment.

The plan above outlined has secured greater comfort and freedom of the patient during a large part of the treatment, and, he was convinced, a larger proportion of good recoveries, as evidenced by better position, more motion, more perfect repair, and greater usefulness than is usually observed after the other methods of treatment.

Dr. JUDSON thought that the apparatus should be removed gradually, the patient being closely observed after each step of relaxation of treatment. Protection from the weight of the body should be the last thing remitted, and the paper had admirably accented the value of the perineal crutch of the Dows' splint in thus protecting the affected and convalescent joint.

Dr. W. R. TOWNSEND thought that orthopedic surgeons were pretty well agreed as to the necessity for a gradual discontinuance of mechanical appliances, but just when this removal of apparatus should be begun was a most perplexing question. Where the acute symptoms returned, even after a considerable interval, it was an indication that the apparatus had been removed prematurely, and not that the case had relapsed. Dows' splint, although an excellent instrument, was too expensive for dispensary practice, and accordingly it was the custom in the out-patient department of the Hospital for the Ruptured and Crippled, to convert the ordinary long extension splint into a "caliper splint," by removing the adhesive plasters, and fastening the splint to the shoe, so that it may be used as an outside crutch. Flexion at the knee is next allowed, and this, by developing the quadriceps muscle, results in rapid and marked improvement. After an interval of from three to six months, the apparatus is removed, and the patient allowed to go about with a cane for several weeks.

Dr. A. M. PHELPS said that the first step in the management of these cases was the treatment of the deformity, and if this were overcome at the outset, relapses were very infrequent. He was of the opinion that patients who were allowed to walk upon the old-fashioned hip splint, experienced an increase in the deformity, and therefore he advocated the use of a very high shoe, with crutches, associated with absolute immobilization of the hip joint. Fixation was not secured by the long traction splint, or any other splint which did not pass up beyond the hip joint. The first essential for successful treatment of an inflamed hip joint was rest. Con-

trary to the teaching of some, among others Dr. L. A. Sayre, motion did not prevent ankylosis; in fact, it sometimes caused it. Regarding the removal of apparatus, his rule was to re-apply the apparatus if the motion became more limited, but to discontinue its use if motion increased.

Dr. ROYAL WHITMAN remarked that the great disadvantage of treatment with crutches was, that they were abandoned without the advice of the attending surgeon, and on this account he thought that the ordinary traction splint was the best compromise that could be made, especially for dispensary practice.

THE CHAIRMAN said that in the matter of the removal of apparatus, each case must be a law unto itself. The Dows' instrument had proved very successful in his hands, but some years ago he had been in the habit of employing the old traction splint, by stitching the buckles to the shoe. The disadvantage of this arrangement was that sometimes it produced traumatism. More recently he had made use of a modified Dows', with perineal band, perineal straps, and snap-joint at the knee, and so adjusted within the shoe that a certain amount of traction could be secured without the use of adhesive plaster.

Dr. TAYLOR, in closing the discussion, said that he did not claim that the long traction splint gave perfect fixation of the joint, but as he believed that counter-traction was practically more important than positive fixation, he favored the former method in the acute stage. He agreed with Dr. Phelps on the necessity for overcoming deformity at the beginning of treatment, and this could usually be done by physiological methods. When to discontinue all treatment, was a matter for individual judgment; if motion increased after the patient's discharge, it was a good indication that the step had not been taken too early. The treatment outlined by Dr. Townsend was excellent, and apparently the working out of an idea similar to that set forth in the paper. The point to be emphasized was, that it was not necessary to deprive the patient entirely of locomotion until he was completely cured, but that by selecting those elements of locomotion suitable for him, he might enjoy the tonic effects of walking, with due protection to the joint, during the greater part of the treatment, and this protected walking should be continued a long time, if necessary.

In answer to a question as to when he would ordinarily apply the Dows' instrument in very young children, Dr. Taylor said that

he thought the average time was about six months of treatment with the traction splint.

A NEW AUTOMATIC TRACTION HIP SPLINT.

Dr. T. HALSTED MYERS presented such an instrument.

It consisted of the ordinary long traction hip splint, made with a short sheath and long extension bar, with the addition of a second sliding foot-piece, to which the leg plasters are attached, and of an adjustable spring to exert the traction.

The second foot-piece slides on the extension bar only. Around and above this is a spring, about eight inches long, whose pushing power is regulated at will by a movable circular band, which can be fastened to any part of the extension bar above the spring, by means of a screw.

To adjust the splint, the band above the spring is moved towards the foot-pieces, (which at first lie close together, one on the other,) till the spring is contracted to the desired extent, and then fastened there. There is now a downward pressure on the sliding foot-piece, of the desired amount. The splint is next applied to the patient, the upper foot-piece buckled to the plasters, so as to touch the sole of the shoe. The extension bar is now keyed out, carrying the lower foot-piece away from the upper one; three-quarters of an inch. This also carries the band above the spring down, and increases the power of the spring somewhat—just how much depending upon its length, the distance between its coils, and the weight of the wire.

When the weight of the body is carried by the splint, any tendency for the straps to bag is overcome by the downward traction exerted by the uncoiling spring, and thus a more equable traction is exerted than has heretofore been possible.

THE CHAIRMAN referred to a somewhat similar spring apparatus which had been devised by Dr. N. M. Shaffer. At the first meeting of the American Orthopedic Association, the speaker had exhibited a very simple arrangement which he had devised. It consisted in using a strong piece of band rubber, buckled into the traction straps, instead of the usual leather straps. He had found its action satisfactory.

Dr. JUDSON said that the relaxation of the straps at the foot of the hip-splint had been frequently discussed. He thought it was best obviated by providing an apparatus as nearly inflexible as

possible. Also, if the pelvic band is worn at a high level, the strap, being long and deeply curved, allows the patient's body to descend when he stands, further than it would if the pelvic band was at a low level, and the strap crossed it in a direction more nearly horizontal.

But it is questionable whether the relaxation of the straps is of serious moment, because, when the patient stands, the traction made by the weight of the leg takes place of the traction previously made by the adhesive plasters when the patient was recumbent, and is practically much greater and more equable and comfortable.

The joint may be "pumped" when the patient walks without any apparatus, because it is subjected to, and relieved from, the weight of the body above, and the weight of the limb below, at every step. Or, pumping may occur when the patient, wearing the splint, repeatedly lies down and stands up, because then there is an alternation between the great weight of the limb, which produces traction when the patient stands, and the force of mechanical traction, which is comparatively small, and takes effect when the patient is recumbent. The only pumping which the joint gets when the patient walks with the hip-splint, is that which comes from the recurrence and removal of the weight of the splint attached to the limb by adhesive plasters. This interference with the repose of the joint should be conveniently prevented by suspending the splint from the opposite shoulder by properly adjusted webbing.

Dr. TOWNSEND said that the "pumping" action to which the previous speaker had alluded, was one of the great objections urged against the long traction splint. He was much pleased with the new splint which Dr. Myers had presented, but he thought there would be much less heard of this sagging of the straps if attention were paid to the adjustment of the splint in the erect as well as in the recumbent position.

Dr. TAYLOR agreed with Dr. Judson as to the part played by the splint and band in causing this sagging, and therefore, if the band were discarded, and in its place some substitute like the one which had just been exhibited by him in connection with the Dows' instrument, part of this trouble would be obviated. The traction produced by the weight of the leg is usually sufficient, and hence the traction splint becomes a crutch during locomotion, and an

extension splint when the patient is sitting or lying. One of the chief advantages of this splint is that it protects the joint in all positions.

NEW YORK STATE MEDICAL ASSOCIATION.—FOURTH DISTRICT BRANCH.

Reported by WILLIAM H. THORNTON, M. D., Secretary.

THE seventh annual meeting was held at the Genesee Valley Club, Rochester, May 12, 1891.

The meeting was called to order at 11 o'clock A. M. by the President, Dr. R. J. MENZIE, of Caledonia.

The minutes of the previous meeting were read and approved.

THE PRESIDENT stated that his manuscript had inadvertently been left at home, hence the President's annual address was omitted.

Upon motion of the Secretary it was voted that a committee be appointed of one member from each county, excepting Erie County which should have two, who should have charge of the scientific programme for the next meeting.

Dr. R. M. MOORE reported for the Committee of Arrangements that a lunch would be served in the adjoining room at the close of the morning session.

Dr. M. W. TOWNSEND announced the death of Dr. Wm. B. Sprague since the last meeting of the Branch. (See p. 570, April number, of the JOURNAL, for obituary notice of Dr. Sprague.)

The following Nominating Committee was appointed: Dr. N. G. Richmond, Chautauqua; Dr. H. D. Ingraham, Erie; Dr. F. L. Stone, Genesee; Dr. F. H. Moyer, Livingston; Dr. J. D. Dunning, Monroe; Dr. J. H. Taylor, Orleans; Dr. J. Dunn, Steuben; Dr. Darwin Colvin, Wayne; Dr. A. G. Ellinwood, Wyoming.

The first paper presented to the Association was entitled Ectopic Gestation, by Dr. M. W. Townsend, of Genesee County. Discussed by Drs. Ingraham and Richmond.

A paper on Noma following Measles was presented by Dr. D. J. Chittenden, of Steuben County. Discussed by Drs. Hubbell and Ingraham, and the author.

A paper on The Purse String or Tobacco Pouch Operation for Cystocele, with Report of Cases, was presented by Dr. H. D. Ingraham, of Erie County.

The Nominating Committee reported in favor of the election of

the following members of the Executive Committee for the ensuing year: Dr. Jas. A. Stevenson, Allegany; Dr. S. J. Mudge, Cattaraugus; Dr. N. G. Richmond, Chautauqua; Dr. H. D. Ingraham, Erie; Dr. F. H. Moyer, Livingston; Dr. M. W. Townsend, Genesee; Dr. R. M. Moore, Monroe; Dr. S. T. Clark, Niagara; Dr. F. D. Vanderhoff, Ontario; Dr. John H. Taylor, Orleans; Dr. Jeremiah Dunn, Steuben; Dr. A. G. Ellinwood, Wyoming; Dr. Wm. Oliver, Yates; Dr. Darwin Colvin, Wayne.

Upon motion of the Secretary the report of the Nominating Committee was received and adopted.

The meeting was then adjourned until 1.45 p. m., and the members partook of a luncheon provided by Drs. E. M. Moore, Jr., and R. M. Moore.

The afternoon session was called to order by the President at 2 o'clock p. m.

The following papers were presented:

Affections of Sight from Injuries, by Dr. Alvin A. Hubbell, of Erie. Discussed by Drs. Rider and Goler, of Rochester.

A New Mode of Making Extension and Counter-Extension in the Application of the Plaster Jacket for Curvature of the Spine, by Dr. Jeremiah Dunn, of Steuben. Discussed by Dr. E. M. Moore, Jr., of Rochester.

Vesico-Urethral Fissure in Women, by Dr. G. W. Goler, of Monroe. Discussed by Dr. E. M. Moore, Jr., of Rochester.

The Treasurer presented his annual report showing receipts of \$57.73; expenses, \$17.10; balance, \$40.63. He recommended that there be no assessment levied for this year. The report of the Treasurer was adopted.

THE PRESIDENT appointed the following Committee on Scientific Programme for the ensuing year: Allegany County, Dr. A. W. Cottrell; Cattaraugus County, Dr. V. A. Ellsworth; Chautauqua County, Dr. T. D. Strong; Erie County, Drs. A. A. Hubbell and Jas. W. Putnam; Genesee County, Dr. F. L. Stone; Livingston County, R. J. Menzie; Monroe County, Dr. G. W. Goler; Niagara County, Dr. Wm. Q. Huggins; Ontario County, Dr. Jas. H. Allen; Orleans County, Dr. H. C. Tompkins; Steuben County, Dr. D. J. Chittenden; Wayne County, Dr. J. N. Arnold; Wyoming County, Dr. Z. J. Lusk; Yates County, Dr. William Oliver.

THE PRESIDENT congratulated the meeting upon the interesting papers and discussions which had been presented, and declared the meeting adjourned.

Progress in Medical Science.

PHYSIOLOGICAL CHEMISTRY.

CONDUCTED BY

JOHN A. MILLER, A. M., Ph. D.

INFLUENCE OF MUSCULAR WORK, HUNGER, AND TEMPERATURE ON THE EXHALATION OF CARBONIC ANHYDRIDE.

V. GRANDIS (*Chem. Centr.*, 1890, I., 1069; *Jour. Chem. Soc.*, 58, 1334). The results of the author's experiments with dogs are as follows :

1. More carbon dioxide is exhaled during muscular work than when the animal is at rest, whatever the conditions as regards food are.
2. When both fasting and tired, the animals exhaled less carbon dioxide than under normal conditions, although for the first few hours after work the amount exhaled was greater.
3. The weight of the animal decreases much more rapidly after exercise than when fasting, six hours' exercise causing as great a loss of weight as when the animal fasted for four days.
4. If, after a seven days' fast, the animal is fed with double the usual amount of food, it regains its weight in three or four days, but this cannot be accomplished with animal food only. The breathing is less rapid during fasting, as also is the heart's action, especially in a warm atmosphere.

THE ALKALINITY OF THE BLOOD UNDER NORMAL AND PATHOLOGICAL CONDITIONS.

E. PEIPER (*Arch. f. Pathol. Anat.*, 116, 337; *Ber. Deut. Chem. Ges.*, 23, 666,) found that the alkalinity of the blood varies within narrow limits. The blood of children is less alkaline, in reaction, than that of adults; of women, less alkaline than of men. The alkalinity of the blood is increased during *digestion*, *muscular activity* and *vomiting*. The spasms of strychnine poisoning causes a decrease.

The author states that in *leukemia*, *diabetes mellitus*, *arthritis deformans*, *chronic articular rheumatism*, *anemia*, *cancerous cachexia uremia*, and in fevers, the alkalinity of the blood is, as a rule, decreased, while in chlorosis it is increased.

THE IDENTIFICATION OF TRACES OF ALBUMIN IN URINE CONTAINING BACTERIA.

ADOLF JOLLES (*Zeitsch. f. Analyt. Chem.*, 29, 407; *Ber. Deut. Chem. Ges.*, 23, 707,) says that by shaking the urine with "kieselguhr" (diatomaceous earth) and then filtering, that the albumin can easily be identified in the filtrate by means of acetic acid and potassium ferrocyanide. In case any albumin remains on the filter, the precipitate is washed with warm caustic potash solution, and the alkaline filtrate acidified with acetic acid and tested with ferrocyanide. (We must not forget that the acetic acid and potassium ferrocyanide test is not an absolutely certain one, as mucin as well as albumin is precipitated by it. The treatment of the kieselguhr on the filter with warm potassium hydroxide solution is of questionable value, as we do not know whether the caustic solution has any solvent action on the bacteria themselves.—J. A. M.)

ACTION OF YEAST ON THE ANIMAL AND HUMAN ORGANISM.

J. NEUMAYER (*Inaug. Diss. München. Hygien. Inst.; Jour. Chem. Soc.*, Vol. LX., p. 237,) finds that the various yeasts pass through the alimentary canal without suffering any change, and are not acted on by the gastric juice, and that they may be eaten without harm to the animal, provided that all fermentable substances are absent, otherwise inflammation of the stomach ensues. This injurious action is not due to the yeasts, or the principal products of their fermentative action, but to abnormal fermentation products formed at the high temperature of the body; if the fermentation proceeds at low temperature, these injurious products are not formed at all, or only in insignificant amount. Subcutaneous injection of the yeasts causes their destruction, without, however, producing any ill effects on the animal.

TRANSFUSION OF MIXTURES OF BLOOD AND SALT SOLUTION.

BY J. MARSHALL (*Zeit. Physiol. Chem.*, 15, 82; *Jour. Chem. Soc.*, 60, 347). Transfusion of salt solution is now so often used in medical practice, that it is important we should have an accurate knowledge of the process of blood regeneration that follows this procedure. Rabbits were bled until convulsions were imminent, and then a solution of one part of defibrinated blood to nine parts of 0.06 sodium chloride solution was injected; tables are given with

enumeration of blood corpuscles, and percentages of hemoglobin before and at intervals after the operation. When regeneration was complete, the animals were killed, but in no case was anything abnormal found at the autopsy. The blood corpuscles reach the normal number in a few days, but the percentage of hemoglobin is not normal for some days, in one experiment not until fifteen days later. The results coincide closely with those of J. G. Otto, who used no injection, but simply watched the course of regeneration after hemorrhage in rabbits.

THE INFLUENCE OF DRINKING LARGE QUANTITIES OF WATER ON THE
EXCRETION OF URIC ACID.

By B. SCHOENDORFF (*Pflueger's Archiv.*, 46, 529 ; *Jour. Chem. Soc.*, 60, 348). The result of the author's experiments is that whilst the total nitrogen is increased, the drinking of large quantities of water has practically no influence on the uric acid.

A BACTERIA-KILLING GLOBULIN.

By E. H. HANKIN (*Proc. Roy. Soc.*, 48, 93 ; *Jour. Chem. Soc.*, 60, 352). The results described in this paper were arrived at by the author while trying to discover the nature of the substance to which the bacteria-killing powers of the blood serum is due. Halliburton's cell-globulin—B was extracted from the lymphatic glands of an animal by sodium sulphate solution. It was found to have the power of killing anthrax bacilli, which property seems to distinguish it from fibrin ferment. This bacteria-killing power is of the same nature as that possessed by blood serum, which, therefore, probably acts in virtue of the same or of some allied substance. From his experiments, the author further concludes that, inasmuch as it is possible to obtain from the cells that are, or can become, phagocytes, a substance having bacteria-killing powers, it may be supposed that phagocytes cannot only kill microbes that they have ingested, but also do this by breaking down, and liberating their contents.

BACTERIAL POISONS.

By VICTOR C. VAUGHAN (*Med. News; Popular Science News*). The author sums up the present state of our knowledge on the above subject as follows :

1. Man is attacked by the infectious diseases either through the alimentary canal or through the blood or lymph.

2. The gastric juice is a physiological guard against infection by the way of the intestines.

3. Additional guards against infection by the intestines are probably to be found in the absorbing cells of the stomach and intestines.

4. Susceptibility to the intestinal infectious diseases is increased when, for any reason, these physiological guards are defective.

5. All toxicogenic germs are dangerous when introduced into the intestines, and their capability of doing injury lies in their production of chemical poisons.

6. Many of these poisons are proteid in character.

7. These poisonous proteids most probably act by catalysis.

8. In the splitting up of complex molecules into simpler ones, heat is liberated and fever manifests itself.

9. The physiological guard against infection through the blood or lymph lies in the germicidal action of the proteids of these fluids.

10. Susceptibility to infection through the blood or lymph is increased by impoverishment of these fluids.

11. We can continue to treat consumption and other systemic diseases by the employment of liberal diet, exercise in the open air, and constitutional remedies without being unscientific in our practice.

12. Filth, without being the bearer of a specific germ, is a cause of disease.

13. Wherever man pollutes the soil about him, the air which he breathes, and the water which he drinks with his own excretions, there enteric fever will be found.

14. In their causal relation to disease, germs cannot be classified without a knowledge of the chemical changes which they induce.

15. While certain bacterial poisons can result only from the growth of certain germs, other poisons similar to one another in their action, though probably not identical, may result from any one of a number of organisms. In the former case we have such diseases as anthrax and small-pox, with their practically constant symptoms and well-marked course; in the latter case we have such diseases as the summer diarrhea of infancy and enteric fever, with their varying symptoms.

ACCIDENTS IN ANESTHESIA.

DR. H. C. WOOD (*Jour. Am. Med. Ass'n*), of Philadelphia, gives the following rules for the proper treatment of accidents during anesthesia :

Avoid the use of all drugs, except strychnine, digitalis, and ammonia.

Give the tincture of digitalis hypodermically.

Draw out the tongue, and raise up the angle of the jaw, and see that the respiration is not mechanically impeded.

Invert the patient briefly and temporarily.

Use forced artificial respiration promptly, and in protracted cases employ external warmth and stimulation of the surface by the dry electric brush, etc.; and, above all, remember that some, at least, and probably many, of the deaths which have been set down as due to chloroform and ether have been produced by the alcohol which had been given for the relief of the patient.

OPHTHALMOLOGY.

CONDUCTED BY

ALVIN A. HUBBELL, M. D.

CENTRAL SCOTOMA.

JENSEN, of Copenhagen, has published an important work on this subject, an abstract of which he furnished to the Danish *Nordisk Ophthalmologisk Tidsskrift*, Vol. III., No. 1. His investigations were upon cases which had presented themselves at Prof. Hensen Grut's clinic from Oct. 1, 1875, to July 31, 1889. Out of 60,125 patients, 269 were cases of central scotoma. This number included all cases, whether the ophthalmoscopic examination was negative or positive, whether the periphery of the field of vision was normal or not, and whether the affection had arisen suddenly or gradually and in one or both eyes. Cases of amblyopia without restriction of the field of vision, whether absolute or relative defect of the central vision presented itself or not, were not included.

He arranged the 269 cases into the following groups : 1, amblyopia centralis ; 2, stationary scotomatous optic atrophy ; 3, progressive scotomatous optic atrophy ; 4, bilateral optic neuritis with central scotoma ; 5, unilateral amblyopia, neuritis, or atrophy, with central scotoma ; 6, glaucoma simplex.

Amblyopia centralis included the majority of all the cases, viz., 189, in three of which it was unilateral. It was characterized by an absence of corresponding changes in the fundus of the eye, by the defect being confined to the central portion of the field of vision where it occurred as a negative scotoma of peculiar shape and extent, which was most readily demonstrable by colors, and by never leading to blindness and often to recovery. It occurred in persons of middle or advanced life for the most part, and the use of tobacco and alcohol was a prominent cause. The scotoma was in no case absolute for a white object $\frac{1}{2}$ to 1 cm. square at a distance of 25 centimeters. The vision varied from $\frac{1}{16}$ to $\frac{1}{8}$. In a few cases it was reduced to counting fingers at 4 or 5 meters. Pathological pallor of the temporal portion of the disc was noticed in seventeen cases, but complete atrophy never occurred.

Stationary scotomatous optic atrophy was rare, being represented by twenty cases. It occurred exclusively in young men under the age of thirty-four, usually between the twentieth and twenty-fifth year. It occasionally showed a hereditary tendency, was sometimes apparently caused by want of sleep or other weakening influences, and often came without any demonstrable cause. It occurred suddenly or reached its maximum in a short time, the central amblyopia was considerable and, as a rule, remained unchanged, neither improving nor getting worse, and it developed usually in both eyes simultaneously. Before the lapse of a year, sometimes much earlier, the ophthalmoscope showed complete atrophy of the optic disc. A decided optic neuritis was never found to precede the atrophy.

Progressive scotomatous optic atrophy was also rare, being found in only twenty-three cases. Like the stationary variety, this condition was present only in men, but in those who were older, between the fortieth and fiftieth year. The cases were frequently syphilitic, and the premonitory symptoms of tabes dorsalis—absence of tendon reflex, myosis, Argyll-Robertson pupil, etc.,—were frequently seen. The central amblyopia or scotoma came on gradually, first in one eye and then the other. Complete atrophy of the papillæ came on with more certainty and earlier than in the preceding form. The disease was progressive in character and the prognosis bad.

Bilateral scotomatous optic neuritis occurred in eleven cases, and differed from the other forms of central scotoma, both as to age and sex of the patients, as well as to symptoms and course.

There was a picture of optic neuritis from intra-cranial affection, and the course was the usual one of this disease. The scotoma was not characteristic of optic neuritis, but was looked upon as the expression of a particular localization of the morbid process in the optic nerve.

Unilateral central scotoma was found in twenty-two cases of varying conditions, such as unilateral optic neuritis, hysteria, disorders of menstruation, incomplete embolism of the central retinal artery, etc.

Glaucoma simplex furnished two cases.

Jensen believes that the answer to the question as to whether or not central scotoma is always produced by a morbid process in the "papilla-macular" fibers of the optic nerve cannot yet be satisfactorily answered for lack of sufficient post-mortem investigations in this direction. However this may be, the simultaneous occurrence and similar development in both eyes are especially suggestive of a common cause in a higher center.—*Ophthalmic Review*, Jan., 1891.

TREATMENT OF BLEPHAROSPASM.

ALLPORT, of Minneapolis (*Am. Jour. Ophthalmology*, Jan., 1891), has adopted the following method of treating the most intractable and annoying condition known as blepharospasm: Place a strong, short eye-speculum between the lids and open its blades until it is deemed that the muscle is put thoroughly upon the stretch. The speculum is then firmly set and allowed to remain for about five minutes. The same result may be obtained by two lid elevators. As the procedure is quite painful, as a rule, it is better to place the patient under a general anesthetic beforehand.

DIVISION OF ANTERIOR SYNECHIA.

LANG (*London Ophthalmic Hospital Reports*, Dec., 1889, and Dec., 1890,) recommends the division of adhesions of the iris to the cornea by means of a pair of knives—one an ordinary Knapp's dissection-knife, the other a similar knife with a blunt point. The eye being cocaineized, the lids separated by a speculum, and the globe fixed close to the adhesion, the sharp-pointed knife is passed through the cornea, at a point as far removed as possible from the synechia, in such a manner that the aqueous will not escape on its

removal. The blunt-pointed knife is then inserted through the opening thus made in the cornea, and the synechia divided by a gentle sawing motion. The employment of eserine, both before and after the operation, is advised, except where the adhesion is central, when atropia is preferable. Sometimes one or more repetitions of the operation are necessary.

ABSENCE OF THE PATELLAR TENDON-REFLEX IN INTERSTITIAL KERATITIS.

LANG AND WOOD (*Royal London Ophthalmic Hos. Reports*, Vol. XII., p. 312,) have recorded the results of their examination of sixty-two cases of interstitial keratitis in reference to the presence or absence of the patellar tendon-reflex, from which they conclude:

1. That in about 30 per cent. of all cases of interstitial keratitis the knee-jerk is decidedly subnormal.
 2. That in about 10 per cent. of all cases it is entirely absent—all known cases of subnormal tendon-reflexes, outside of the constant fact that the local eye-disease exists, having been eliminated.
 3. It is probable also that in a very small percentage of cases of diminished and absent knee-jerks the usual constitutional dyscrasia cannot be demonstrated.
 4. That it is rare to find a case of exaggerated patellar tendon-reflex in interstitial keratitis when unaccompanied by some of the affections known to produce the former.
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MUSCULAR ASTHENOPSIA.

ROOSA (*Ophthalmic Review*, October, 1896,) does not believe that muscular asthenopia, as generally understood, has any such importance as writers have attributed to it. Myopia, hypermetropia, and astigmatism are the causes of muscular insufficiencies. An organic fixed condition of the eyeball is the chief cause of asthenopia, and unstable secondary muscular conditions do not deserve much consideration. No fixed standard can be devised by which to measure the power of the muscles of the eye, any more than for other muscles of the body.

Selection.

THE CONTAGIOUSNESS OF CHRONIC URETHRAL DISCHARGES.¹

BY GEORGE EMERSON BREWER, M. D., New York.

THE practising physician is frequently called upon to answer inquiries regarding the limit of the contagious stage of a gonorrheal urethritis.

The question is a serious one, especially when considered in its relation to marriage, and should, I believe, be regarded as equal in importance to that of syphilis.

It has not infrequently been my experience to be consulted by young men, a few weeks or months before a contemplated marriage, with a history of one or more attacks of gonorrhea in former years, and who believe themselves to be well; yet who, upon a careful examination, present the unmistakable signs of a chronic urethritis.

The only evidence of disease remaining in these cases may be, and frequently is, the presence in the urine of small thread-like bodies, to which the name of *tripper faden* has been given by the German surgeons who first described them and demonstrated their importance. These minute shreds are composed of mucus, pus, and epithelium; and represent the secretions which adhere to any granular patch or area of chronic inflammation remaining on the urethral mucous membrane.

As these cases have often caused me no small measure of anxiety, it is the object of this communication to call attention to the opinions of some of our most prominent authorities upon the subject, and to elicit the views of those present whose experience has been greater than my own.

In consulting the standard authors upon the subject of genito-urinary diseases, one is impressed by the marked difference of opinion, regarding the contagiousness of chronic urethral discharges, held by those whose reputation and experience entitle them to the foremost position in the discussion of this question.

As early as 1785, Kühn called attention to the fact that the discharges resulting from a gonorrhea remained contagious so long as they contained pus. The opposite opinion was held by Hunter, who

1. Read before the Section on Genito-Urinary Surgery, New York Academy of Medicine, Thursday evening, Feb. 12, 1891.

denied the possibility of contagion from the gleet discharges of a chronic urethritis. This view was also shared by Bell and Ricord. In a paper entitled *Gonorrhea a Non-specific Disease*, published in the *New York Medical Independent* in 1864, A. K. Gardiner strenuously denies the contagious element in any save the discharges from the most acute stage of the disease; and says regarding gleet that it is "allowably benign and innocuous."

Noeggerath, on the other hand, in a paper published in 1872,¹ concludes that a man who has once been the subject of a gonorrheal urethritis, *never* fully recovers; that the disease invariably lingers in the glands and ducts emptying into the canal, and may at any time furnish a secretion which may infect those with whom he has sexual relations. He also states that nine-tenths of all women married to men who have had gonorrhea, sooner or later become the subject of incurable and painful inflammatory disease of the uterus, tubes, or ovaries; that this infection may take place rapidly, and manifest itself as an acute affection, or by means of a slow and unrecognized process to which he gives the name of "latent gonorrhea." In a subsequent paper, read before the American Gynecological Association in 1876, the author reiterates these opinions, and adds that 90 per cent. of all cases of sterility can be directly traced to gonorrhea.

Without entering into any discussion regarding the correctness of these views, which have been the object of considerable criticism, the fact remains that these papers had the effect of calling attention to a source of female disease and suffering, the importance of which had not, until their publication, been adequately recognized.

This difference of opinion upon so important a question is hardly to be wondered at, when we consider that at the time these views were enunciated, nothing definite was known regarding the etiology of this disease.

Since the discovery by Neisser, in 1878, of the gonococcus, and the establishment of its relationship to this disease, but one opinion can logically be held by those who accept his theory of gonorrheal inflammations, and that is, that all secretions containing this micro-organism are capable of transmitting the disease under favorable conditions. In his recently published work² upon this subject, Ernest Finger emphasizes this point and states, regarding marriage,

1. "Die Latente Gonorrhöe im Weiblichen Geschlecht," Bonn, 1872.

2. "Die Blennorrhöe der Sexualorgane und ihre Complicationen," 1898.

that it should be absolutely prohibited in all cases where the existence of a chronic urethritis is evidenced by the presence of the "morning drop" or *tripper faden* in the urine, until the following facts have been established :

1st. That after from two to four weeks of daily observation, the secretions from the urethra are found to be *free from pus and made up wholly of epithelial cells*.

2d. That no gonococci can be detected by the microscope, even after a purulent discharge has been established by the employment of irritating injections of corrosive sublimate or nitrate of silver ; and

3d. That neither postatitis nor stricture exists.

I must confess that upon first becoming acquainted with the views expressed by this author, I regarded his conditions unnecessarily severe, and his opinion of the danger greatly exaggerated. A somewhat remarkable case, however, soon came under my observation, which illustrated in a most striking manner the fact that unless some of the precautions advised by Finger had been insisted upon, the responsibility of a terrible and dangerous illness would justly have rested upon my head.

Mr. H., aged 30, called on me in October, 1889, and stated that he expected to be married in six weeks, and that although he knew himself to be perfectly well, he desired the confirmatory assurance of a physician after a thorough examination. He told me that, six years ago, he had experienced an attack of urethritis which was unusually acute and severe, and which continued uninterruptedly for a period of more than twelve months. After nearly a year of unsuccessful treatment, he submitted to a circumcision and meatotomy in the hope that the improved condition of the parts might favor a more rapid recovery.

At the end of a very tedious course of treatment the discharge ceased, and with the exception of one or two slight exacerbations after alcoholic or sexual excesses, he has since remained free from the evidences of an active urethritis. For the past three years, he alleged, there had been absolutely no urethral discharge save at times a slight moisture at the meatus in the morning.

Upon examination no secretion could be pressed from the urethra. Exploration by means of the urethrometer revealed a normal caliber of 36 F.—meatus 28—a stricture measuring 30 at 3 inches. Endoscopic examination showed granular patches and congested areas in the neighborhood of the bulb and behind the stricture.

An examination of the urine revealed, in the first portion

passed, a number of *tripper faden*. One of these was selected, spread out upon a slide, stained, examined microscopically, and found to contain epithelial cells, pus, and several very characteristic colonies of gonococci.

At the conclusion of the examination he was told that it would be impossible for him to think of being married at the time stated, or at any subsequent date, until he had been relieved of his chronic urethritis, and until examination of the urethral secretions failed to demonstrate the presence of gonococci. Upon the receipt of this advice he became somewhat indignant, affirmed that "he knew better," and that repeated experience had taught him that there was nothing contagious remaining in his urethra. I immediately called upon Dr. Holbrook Curtis who was in an adjoining room, to confirm the microscopic diagnosis and bear witness to what was said, and I again repeated in his presence my former statement and added that as his medical adviser I absolutely forbade the marriage, and that if he declined to accept my advice, he must assume the entire responsibility.

Without dwelling upon the details of several interviews which followed, suffice it to say that he reluctantly promised to postpone the ceremony and undergo a proper course of treatment.

The strictures were divided and the subsequent treatment consisted in the passage of full-sized sounds, urethral irrigation, and local applications by means of the endoscope. He slowly but steadily improved, and at the end of five weeks the *tripper faden* had markedly decreased in numbers; gonococci could, however, occasionally be found. At no time was there any discharge from the urethra.

At this period he suddenly announced that it was his intention to carry out his original plan and be married in a week—which he did against my advice and assuming all responsibility.

The sequel to this narrative is peculiarly sad and instructive.

Two weeks after the ceremony I was called to attend his young wife, who presented all the symptoms of a severe gonorrheal infection. Examination revealed the presence of an angry and painfully acute purulent urethritis and vulvitis, pus from the urethra showing abundant colonies of gonococci. A severe cystitis followed, a large vulvo-vaginal abscess, which was opened under ether, also a marked pyelitis, which continued for many months. The patient was in bed under the constant watchfulness of a trained nurse for seven weeks, and during the year which followed was more or less of an invalid,

suffering from recurrent attacks of cystitis, and all directly traceable to the unfortunately premature marriage.

I am aware that extraordinary and seemingly remarkable cases of this kind frequently admit of a more simple and rational explanation when all the facts are accessible, and that the discovery of another and more recent source of infection often dispels illusions and destroys theories which have been reared upon the insufficient evidence of a few imperfectly investigated cases. In this case, however, I was in a position to become familiar with all the circumstances, and having a professional acquaintance with both patients and their families for several years, I can state without the slightest hesitation that the possibility of an infection, in a manner other than I have indicated, is wholly out of the question.

In reviewing the records of nearly one thousand cases of urethritis, treated by me during the past five years, I find that in six instances I was consulted regarding the propriety of marriage, under circumstances similar to those which existed in the case reported above. My rule had always been in such cases never to allow marriage until at least three months had elapsed since the cessation of all acute symptoms, and until repeated examinations of the secretions (including the *tripper faden*) had failed to show the presence of gonococci. In the six cases referred to, these conditions were observed—and in no instance has the wife exhibited the slightest evidence of infection.

It is to me somewhat surprising that, in most of the recent works on this disease, little or no attention is given to this very important subject, whereas the questions of syphilis and marriage has occupied the attention of a very large number of writers. I think I am justified in saying that it is the opinion of those acquainted with the subject, that far more suffering and incurable disease in women can be attributed to gonorrheal than to syphilitic infection.

In conclusion, allow me to urge upon all interested in this subject the necessity of unusual care in examinations undertaken with a view to forming an opinion regarding the propriety of marriage, in those who have been the subject of gonorrheal urethritis. The safest method would be to follow the advice of Finger as quoted above; certainly none should assume the responsibility of sanctioning a marriage without at least imposing the conditions which it has been my custom to insist upon, before I became acquainted with the views of this distinguished authority.—*Journal of Cutaneous and Genito-Urinary Diseases.*

BUFFALO MEDICAL AND SURGICAL JOURNAL

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THOMAS LOTHROP, M. D. - WM. WARREN POTTER, M. D.

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Editorial.

AMERICAN MEDICAL ASSOCIATION.

THE forty-second annual meeting of the American Medical Association, held in Washington, May 5, 6, 7, and 8, 1891, was one of its best. Probably it would not be stating the matter too strongly to say that in some respects it was the very best meeting the Association ever held.

Two conditions contributed to make the meeting particularly notable, namely: First, its President, Dr. W. T. Briggs, of Nashville, who performed the duties of his office in a manner most acceptable, displayed great tact and parliamentary skill in his disposition of the business, and particularly in dealing with those estimable gentlemen who annually seek to weary the house with their display of windy nothingness, and who generally succeed in embarrassing the Chair with their persistency in seeking his eye and ear. Woe betide such men when Dr. Briggs swings the gavel. The President, in this instance, combined the rare qualifications of professional ability, ripe judgment and parliamentary knowledge.

The second felicitous fact that contributed to success was the cool weather which prevailed during the entire session. Usually the first week in May is hot in Washington, and ill suited to the performance of intellectual work, but this time overcoats and fires were in demand.

The attendance was not as large as when the meeting was held in Washington in 1884, but the number was ample for the performance of good work, and the sections were well attended.

The officers elected for the ensuing year were: President, Dr.

Henry O. Marcy, of Boston; 1st Vice-President, Dr. Willis P. King, of Missouri; 2d Vice-President, Dr. Henry Palmer, of Wisconsin; 3d Vice-President, Dr. W. E. B. Davis, of Alabama; 4th Vice-President, Dr. W. E. Taylor, of California; Treasurer, Dr. Richard J. Dunglison, of Pennsylvania; Secretary, Dr. Wm. B. Atkinson, of Pennsylvania; Librarian, Dr. Geo. W. Webster, of Illinois; Trustees, Drs. W. W. Dawson, of Ohio, W. W. Potter, of New York, and J. H. Rauch, of Illinois. The nominating committee was fortunate in the selection of its chairman, Dr. W. H. Wathen, of Louisville, whose rare skill and judgment, as well as intimate knowledge of the affairs of the Association, derived from long experience, guided it safely through its multifarious duties without serious conflict or misunderstanding. The Committee agreed upon Hot Springs as the next place of meeting, but the house, on motion of Dr. H. O. Walker, of Michigan, struck out Hot Springs and inserted Detroit. So the place of meeting in 1892 will be Detroit, Michigan, where it will convene on the first Tuesday in June.

Dr. H. O. Walker was chosen chairman of the Committee of Arrangements, which is a guaranty that the Association will be courteously and kindly cared for during its forty-third annual session. We note but one error named in the list of nominees, and that was in choosing Dr. Didama, of New York, to the place on the Judicial Council. As Dr. Didama was not present at the meeting, he is ineligible under the rules.

The absorbing questions which first confronted the Association was that pertaining to the place of publication of the *Journal*, and who should be placed at its editorial head. The Trustees wisely decided that there should be no change in the *Journal's* home, and so the general session was relieved of a perplexing discussion, which would have inevitably followed if the subject had been thrown into the house. The Trustees were unable to come to a conclusion in Washington as to the editor, hence adjourned to meet in Chicago, May 13, 1891. At this meeting the Board of Trustees elected Dr. J. C. Culbertson, of Cincinnati, to be editor, and to manage the business of the *Journal* as well. Dr. Culbertson has been for a number of years the editor and owner of the Cincinnati *Lancet-Clinic*, hence brings experience, as well as ripened judgment and editorial reputation, to his new field. We have no doubt that the *Journal* will continue to prosper under his skilful guidance. Taken all in all, the forty-second annual meeting of the American Medical Association may be regarded as a pronounced success, one

long to be remembered for the scientific work which it accomplished, as well as the wisdom that governed in its deliberations over some of the assuredly important and trying affairs that pertain to such a representative body of American physicians.

NOTES OF THE MEETING.

The election of Dr. Henry O. Marcy, of Boston, to the presidency was a fitting recognition of the services of one of its most faithful members and indefatigable workers. Dr. Marcy always attends the meetings and contributes largely to their scientific interest each year. We hardly see how the Association could have done otherwise than to choose him as its first officer.

Dr. Charles A. L. Reed, of Cincinnati, introduced his resolution providing for a continental congress of physicians and surgeons, which was passed without opposition. A committee of one from each State and Territory was chosen to carry out the details of the organization, and this committee subsequently most properly elected Dr. Reed its *Chairman*; Dr. Carhart, of Texas, *Secretary*; and Dr. Love, of Missouri, *Treasurer*. We have no doubt, from the character of the committee, that the work will be well done, and that the Congress will prove a pronounced success.

The State Medical Examining Boards, through their representatives, held a conference on Wednesday, May 6th, to devise ways and means for uniformity in the conduct of their duties. This meeting was presided over by Dr. J. H. Rauch, Secretary of the Illinois State Board of Health, who may justly be regarded as the father of the State Examining and Licensing Board System.

Dr. Picot, of North Carolina, was made Secretary of the conference, and an interesting session was held, at which representatives of the several States made many valuable suggestions as the result of their experience. It may be expected much good will come from the conference.

The Medical Editors held an interesting meeting, after which a dinner was enjoyed at Chamberlin's, on Monday night, May 4th. Dr. Frank Woodbury, of Philadelphia, was elected President for the ensuing year.

The social features of the meeting were necessarily of a high order, and embraced a reception by the physicians of Washington, on Tuesday night, at the Arlington, and one by Dr. Wm. A. Hammond at his elegant suburban villa, Belcourt, on Wednesday evening. The

Corcoran Art Gallery, the National Museum, and Mr. Thomas E. Waggaman's private collection were generously thrown open to the visitors. Surgeon-General Chas. Sutherland gave a reception at the Army Medical Museum, and an excursion was given to Mount Vernon. These, together with numerous private dinners and luncheons, afforded ample opportunity for social enjoyment. Many ladies were present, and fittingly graced these unofficial features of the meeting.

IN HONOR OF DR. ROSWELL PARK.

IN THE May number of this JOURNAL we published an obituary of Dr. Chas. T. Parkes, late Professor of Surgery in Rush Medical College, Chicago, Ill. It appears that soon after the chair became vacant through this sad event, the Faculty decided to divide it into two departments, tendering one to Dr. N. Senn, and the other to Dr. Roswell Park of this city. Dr. Park, after due consideration, declined to accept, hence will remain in Buffalo. His many friends, in and out of the profession, thereupon united in tendering him a banquet in appreciation of his decision. The date fixed upon therefor was May 18th, but the sudden death of Dr. Burwell, who was one of the principal movers in the project, caused a postponement to May 25, 1891, and it is now being held even while these lines are printing. We hope to speak further of the event in our next issue.

THE BUFFALO WOMAN'S HOSPITAL is now permanently established at No. 191 Georgia street, corner Seventh. The hospital is a growth of the work previously carried on at the Maternity Hospital, and aims now to enlarge its usefulness to the public and the profession, by treating all diseases peculiar to women. The character and ability of the attending and consulting staff is a guaranty of the excellent work this institution will do. We commend it to the profession—from which it merits a liberal patronage.

Journalistic Note.

THE AMERICAN MICROSCOPICAL JOURNAL is heartily welcome to our exchange table. It retains the same size and form given it by its founder, Prof. Hitchcock. As the *Journal* contains much of value, we shall look forward to each month's arrival with considerable interest.

Personal.

DR. H. O. WALKER, of Detroit, Mich., has been appointed surgeon to the police department in that city, vice Dr. J. B. Book, resigned. Dr. Walker is an eminent surgeon and one of Detroit's most prominent physicians. He brings to his new position not only the skill of an experienced surgeon, but an executive capacity worthy the important trust. The city is to be congratulated that can obtain the professional services of such a man.

REMOVAL.—Dr. G. W. McCray, the well-known druggist and manufacturing pharmacist, who was located for so many years at 213 Main street, Buffalo, has removed to 897 Main street. This is one of the best up-town locations in the new "Strathmore," and Dr. McCray is to be congratulated upon a progressive and enterprising move.

THE appointment of Dr. E. C. W. O'Brien to the position of Fire Surgeon, which has been announced, is a fitting recognition of his gratuitous services to members of that department for a number of years. The choice is a good one.

DR. M. B. FOLWELL sailed, May 16th, for Europe, accompanied by his family. He will return the latter part of August.

Obituary.

DR. GEORGE N. BURWELL died at the residence of his sister, Mrs. Wm. H. Glenny, in this city, on Friday evening, May 15, 1891, aged 72 years. For nearly half a century Dr. Burwell had been identified with the medical profession of Buffalo, and had come to be known as one of its strongest and most able members. He was at the time of his death almost the only remaining one of that coterie which has been familiarly spoken of as the old *regime*. Certainly, he was one of the best known physicians in Western New York, and he was particularly endeared to many of the older families in Buffalo. There is scarcely a house within the old city limits that Dr. Burwell has not entered in a professional capacity, either as

attending or consulting physician. There is scarcely a family that he has not ministered to some member of, and his name has become endeared to the community by all the attachments which surround the sacred name of family physician.

To those who are familiar with Buffalo during the latter part of the 'forties and early 'fifties, will be recalled the very active part Dr. Burwell took in establishing the Medical Societies on a firm basis for good work. The proceedings of the Buffalo Medical Association during that period present evidences of his regular, conscientious, and active attendance upon the meetings, and the part he bore in the discussions was creditable alike to himself personally as well as to the profession which he loved and served so well. The name of Burwell will always remain a pleasant memory to the medical profession of Buffalo, and it may be said with truth that "take him for all in all we shall not look upon his like again."

His funeral was largely attended from St. Paul's church, on Tuesday, May 19th, and his remains were followed to their last resting place by a large group of mourning friends, while thousands dropped the tears of affection as the cortege wended its solemn way to the place appointed for all the living. He lived a pure and simple life; he died an ideal death. *Requiescat in pace.*

DR. FOWLER BRADNACK, who died in this city on Easter Sunday, March 29, 1891, was born at Great Yarmouth, Norfolk, England. He came to Buffalo when quite a young man, and by his winning manners, fine mind, and brilliant talents, won many friends.

Many will remember his humorous poems, published in several papers and magazines, and especially the one that gained for him the prize of life-membership of the Buffalo Library. He studied medicine, and graduated from the Buffalo Medical College in 1871 with distinguished honors.

He was married, in 1873, to Nettie L. Hickox, of Winfield, Herkimer county, N. Y., and removed to New York, where he practised his profession. He won the hearts of his patients by his kindness and sympathy, as well as by his thorough knowledge and skill.

The death of his wife, which occurred in 1880, was a severe blow to the doctor. Being a man of literary taste, he continued to write both prose and verse, but only occasionally publishing his writings. He married again in 1887, a Buffalo lady (who survives him), and returned to Buffalo.

Dr. Bradnack was a close student. Literature and music were his delight. Those who heard him play on the piano the classical music he so much loved, were charmed by his wonderful and delicate touch. Many a time had he turned to find his audience weeping. He was a frequent visitor at the Library, and, about a year ago, he delivered An Essay on Snakes, before the Buffalo Society of Natural Sciences. His unpublished manuscripts show years of thoughtful toil. His last published article was in the June and July number of the JOURNAL, the subject being Death, Its Modes, Signs and Premonitions. He made the remark, while writing it, "This is the last article I shall ever write!" feeling, no doubt, symptoms of the malady that sent him to an early grave.

He had a long and wasting illness, but his patience, and even cheerfulness, was very remarkable. He often spoke affectionately of his many friends, who were so untiring in their attentions. He leaves a father, Rev. Isaac Bradnack, of Panama, Chautauqua county, N. Y., and two sisters, Mrs. Elizabeth Wilkinson, of Panama, and Mrs. Dr. W. C. Earl, of this city.

DR. A. F. HELWIG, of Swormville, Erie county, N. Y., died recently at his home. The Medical Society of Erie County has taken appropriate action, which will be published in the proceedings of the special meeting next month.

Medical College Notes.

THE UNIVERSITY OF BUFFALO.—The following changes and additions have been made to the teaching staff of the Medical Department:

Dr. P. W. Van Peyma, Adjunct Professor of Obstetrics; Dr. De Lancey Rochester, Adjunct Professor of the Principles and Practice of Medicine; Dr. Eli H. Long, Adjunct Professor of Materia Medica and Therapeutics; Dr. Wm. H. Bergtold, Adjunct Professor of Pathology; Dr. James W. Putnam, Professor of Diseases of the Nervous System. Dr. F. Whitehill Hinkel, Professor of Laryngology; Dr. Frank H. Potter, Clinical Professor of Laryngology; Dr. Wm. H. Heath, Associate Professor of Genito-Urinary and Venereal Diseases; Dr. Herbert U. Williams, Lecturer on Biology; Dr. Fred B. Willard, Instructor in Anatomy; Dr. Allen A. Jones, Instructor in Medicine; Dr. A. L. Benedict, Instructor in Materia Medica and Therapeutics; Dr. M. A. Crockett, Instructor in Obstet-

rics and Gynecology ; Dr. Wm. H. Chace, Instructor in Chemistry. Other appointments are soon to be made.

The Medical Department will soon occupy more commodious buildings. The Council of the University has bought a large lot on High street, upon which a handsome college edifice is to be erected at a cost of not less than \$125,000 ; the term is to be extended to seven months; the course graded, and every department fully equipped with teachers. Dr. John Parmenter has succeeded Dr. Chas. Cary as Secretary and Treasurer of the Faculty.

Society Meetings.

THE MEDICAL ASSOCIATION OF WESTERN NEW YORK.—The twenty-fourth annual meeting of the Medical Association of Central New York will be held in the Lecture Hall of the Y. M. C. A. Building, Mohawk and Pearl streets, Buffalo, N. Y., on Tuesday, June 2d, at 10 o'clock, A. M. The provisional programme comprises the following papers:

PRESIDENT'S ADDRESS.

The Converging Lines of Medical and Surgical Treatment, by Nathan Jacobson, M. D., Syracuse, N. Y.

GYNECOLOGICAL.

Operative Treatment of Retroflexion of the Uterus, by M. D. Mann, M. D., Buffalo, N. Y.; Cases Illustrative of the Difficulty of Diagnosing Abdominal and Pelvic Tumors, by John Van Duyn, M. D., Syracuse, N. Y.; Ill Effects of Electricity upon large Uterine Fibroids, by C. O. Baker, M. D., Auburn, N. Y.; Ectopic Gestation, by Henry D. Ingraham, Buffalo, N. Y.

SURGICAL.

Discussion on Epilepsy: Pathology, by Jas. W. Putnam, M. D., Buffalo, N. Y.; Effects on Peripheral Irritation in Inducing It, by Dr. Wm. C. Krauss, Buffalo, N. Y.; Medical Treatment, by Floyd S. Crego, M. D., Buffalo, N. Y.; Surgical Aspects, by Roswell Park, M. D., Buffalo, N. Y.; Osteo-Sarcoma, by H. W. Carpenter, M. D., Oneida, N. Y.; Arthrectomy of the Knee Joint, by Herman Mynter, M. D., Buffalo, N. Y.; Operative Treatment of Spastic Paralysis, by L. A. Weigel, M. D., Rochester, N. Y.; Report of a Case of Unusual Fracture of the Inferior Maxilla, by Wm. C. Barrett, M. D., Buffalo, N. Y.

MEDICAL.

Treatment of Pulmonary Hemorrhage, by N. W. Soble, M. D., Rochester, N. Y.; Pneumonia as I See and Treat It, by A. A. Young, M. D., Newark, N. Y.; Traumatic Hysteria from Railroad Injury, by J. B. Andrews, M. D., Buffalo, N. Y.; Traumatic Electric Neurosis, by Jas. W. Putnam, M. D., Buffalo, N. Y.; Acute Chorea in a Man Sixty-eight Years old, by W. R. Howard, M. D., Rochester, N. Y.; Rhus Aromatica in Incontinentia Urinæ, by W. C. Krauss, M. D., Buffalo, N. Y. The Clinical and Pathological Significance of Vertigo, by Henry L. Elsner, M. D., Syracuse, N. Y.; Vertigo and the Eyes, by Lucien Howe, M. D., Buffalo, N. Y.; the Therapeutic Indications offered by the Clinical and Pathological Study of Vertigo, by Floyd S. Crego, M. D., Buffalo, N. Y.; Virchow's Post-Mortems and the Tissues Especially Influenced by Tuberculin, by Wm. C. Bailey, M. D., Albion, N. Y.; Motor Disturbances of the Stomach, by Chas. G. Stockton, M. D., Buffalo, N. Y.; the Rational Treatment of Digestive Disorders, by Albert E. Persons, M. D., Buffalo, N. Y.; Hydrochloric Acid in Gastric Disease, by A. L. Benedict, M. D., Buffalo, N. Y.; Deficient Oxygenation as an Etiological Factor in Disease, by DeLancey Rochester, M. D., Buffalo, N. Y.; The Use of Oxygen for the Correction of Morbific Material in the Blood, by Samuel G. Dorr, M. D., Buffalo, N. Y.; Report of Rare Cases of Skin Disease, by Geo. J. Lund, M. D., Medina, N. Y.; Infantile Eczema, by Ernest Wende, M. D., Buffalo, N. Y.

THROAT AND NOSE.

Anenoid Growths of the Naso-Pharynx and their Relation to Aural Disease—Remarks on Treatment, by Jas. E. Nichols, M. D., New York City; Intubation in Syphilitic Stenosis of the Larynx, by John O. Roe, M. D., Rochester, N. Y.; Diagnosis of Throat and Nose Diseases, with Suggestions Regarding Some of the Minor Operations, by F. A. Mandeville, M. D., Rochester, N. Y.; Some After Effects of the Recent Influenza, by Frank H. Potter, M. D., Buffalo, N. Y.

EYE AND EAR.

a Ocular Reflexes; *b* Presentation of a Case of Hematoma Auris in a Sane Patient, by Alvin A. Hubbell, M. D., Buffalo, N. Y.; Influenza and Ear Disease, by J. Falk, M. D., Buffalo, N. Y.; *a* Formation of Bone in the Eye with Specimen; *b* Demonstration of an Instrument for Testing the Vision, by Lucien Howe, M. D., Buffalo, N. Y.

GENERAL.

Cremation, by J. C. Thompson, M. D., Buffalo, N. Y.; Electricity in General Practice, by Ira C. Brown, M. D., Buffalo, N. Y.; Overcrowding of Tenement Houses, by W. C. Callahan, M. D., Buffalo, N. Y.

At the Rochester meeting last year, by unanimous vote, the Erie County Society was elected to membership in the Association, and Buffalo appointed as the place of meeting for this year. It was also decided to discontinue the Autumn meeting, and hold the annual meeting in June, alternately at Buffalo, Syracuse and Rochester.

Luncheon will be served at "Oaks," 64 W. Genesee street, at 12.30 P. M.

NATHAN JACOBSON, *President*.

EDWARD B. ANGELL, *Secretary*.

THE NATIONAL ASSOCIATION OF RAILWAY SURGEONS held a two days' meeting in Buffalo, commencing April 30th. About 150 members were present from various parts of the Union, chiefly from the south and west. A number of interesting papers were read and discussed. Dr. and Mrs. B. H. Daggett, of this city, gave a reception in honor of the delegates on Thursday evening, April 30th, which was largely attended and was a most enjoyable occasion. An excursion was given to the members to Niagara Falls, on Saturday, May 2d, after the final adjournment. Dr. Murphy, of St. Paul, was chosen President, and the next place of meeting is White Sulphur Springs, W. Va.

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE held a memorial meeting on Saturday evening, May 16, 1891, at which appropriate action was taken in reference to the decease of Dr. Geo. N. Burwell. The attendance was unusually large, and the remarks made by many of the speakers were feelingly and appropriately delivered. The Society voted to attend Dr. Burwell's funeral in a body, and to spread upon its minutes a tribute to his memory. We expect to publish the proceedings in full in our next number, as the minutes were not received in season to appear in this issue.

Book Reviews.

KOCH'S REMEDY IN RELATION SPECIALLY TO THROAT CONSUMPTION.
By LENNOX BROWNE, F. R. C. S., Ed., Senior Surgeon to the Central London Throat, Nose, and Ear Hospital; author of "The Throat and Nose, and their Diseases," etc. Illustrated by thirty-one cases and by fifty original engravings and diagrams. Philadelphia: Lea Brothers & Co. 1891.

This is a valuable contribution to the study of the important question, What is the proper application of Koch's lymph in the treatment of tuberculosis? It takes, on the whole, a favorable view, and, in this respect, coincides with the opinion of Sir Morell Mackenzie, who, in his last paper, says :

Whilst the injection of Koch's fluid may not have deserved the enthusiastic reception it first met with, it does not merit its present obloquy. Professor Koch has made a most important discovery; and, when the details as regards dosage have been thoroughly worked out, and conclusions have been arrived at as to the best kind of remedies, constitutional and local, to combine with it, tuberculin will prove a most valuable addition to the curative agencies in the hands of physicians.

Mr. Browne believes from his own experience, that phthisis, in the beginning, can be cured with certainty with this remedy; and this statement is made in large type, so as to impress it upon the mind of the reader. These conclusions from, perhaps, the two best-known laryngologists in England, should, and no doubt will, receive careful attention. At the same time, so many warning voices have been raised concerning this treatment, that our opinion should take, at the present time, the form of the Scotch verdict, "Not proven." Mr. Browne gives his experience in a very pleasing and thorough way. The cases are well presented, and illustrated with charts and drawings, showing the laryngeal appearances from time to time. This we believe to be the most valuable part of the book, and the part to be most consulted. Next to the report of cases, the chapter on Indications and Counter-indications will receive the most attention. The lymph should not be used in the very young or the very old; indeed, Browne thinks it doubtful whether it should be administered much after middle life, on account of its potent influence on the higher nerve centers. Alcoholism, plumbism, and other constitutional diseases engendered by habit of life and by occupation, render its employment doubtful.

Syphilis, on the contrary, is not a counter-indication. Besides these, many questions occur in connection with the tuberculous process itself — its location, its extent, etc. — that materially modify the selection of the lymph treatment. So far as location is concerned, Browne believes that in throat consumption the remedy is especially useful. Upon reading this work, we are more than ever impressed that this whole matter is still in the experimental stage. The contribution of Mr. Browne is, however, of great merit. It is such work that will finally place us in a position to know just the application to make of Koch's lymph in the treatment of consumption.

F. H. P.

ESSENTIALS OF SURGERY, TOGETHER WITH A FULL DESCRIPTION OF THE HANDKERCHIEF AND ROLLER BANDAGE. Arranged in the form of questions and answers; prepared especially for students of medicine. By EDWARD MARTIN, A. M., M. D., Instructor in Operative Surgery, University of Pennsylvania; Surgeon to the Howard Hospital; Assistant Surgeon to the University Hospital. Sanders' Question Compend No. 2. Illustrated; fourth edition, revised and enlarged by an appendix, containing full directions and prescriptions for the preparation of the various materials used in Antiseptic Surgery. Also several hundred receipts covering the medical treatment of surgical affections. Philadelphia: W. B. Sanders. 1891. Price, \$1.00.

This volume is one of the best of the Question-Compend, having passed through three previous editions. It is no longer a stranger to the student, the quiz-master, or the reviewer. When we saw the first edition, two years ago, we regarded it with as much favor as we can bestow on any question book. It is impossible to acquire a knowledge of surgery within the lines covered by such a work; nevertheless, it may serve to refresh one's memory, or to clear up an intricate point, without searching through a general treatise. The illustrations are fairly good, while the letter-press, paper, and make-up of the volume are excellent. It is more comprehensive than such books are in general, and we commend it to those in need.

THE DAUGHTER. HER HEALTH, EDUCATION, AND WEDLOCK. Homely Suggestions for Mothers and Daughters. By WILLIAM CAPP, M. D. Philadelphia and London: F. A. Davis. 1891. Price, \$1.00, net.

In this neat duodecimo volume of 144 pages, Dr. Capp has condensed a vast amount of useful information that every woman may read with profit. It is written in a pleasing style, free from technical language, and clothed in good diction. The importance of

knowledge on the subjects of health, education, and wedlock are sufficiently well understood by all persons of intelligence at the present day. It is not competent for our grandmothers to presume, because they were never ill, that their granddaughters may pursue the same lines of life that they followed in the early years of the century. We must deal with the civilization of today in giving advice with reference to health and education to girls of this period, and this without regard to whether their mothers or grandmothers need a doctor or not. In our view, it were infinitely better for the present generation had the grandmothers paid more attention to subjects dealt with in the book before us. We shall be content with saying that it is one of the best of its kind. The publisher presents it in an attractive form.

A COMPEND OF GYNECOLOGY (Quiz-Compend No. 7). By HENRY MORRIS, M. D., Late Demonstrator of Obstetrics and Diseases of Women and Children in the Jefferson Medical College, Philadelphia. With forty-one illustrations. Philadelphia: P. Blakiston, Son & Co. 1891.

This compend is well prepared by a man who thoroughly understands the details of his subject and who has been sufficiently clear in the text to make the book something more than the ordinary compend. The illustrations are, for the most part, excellent, and will aid in the understanding of the author's plan. Since we must have Quiz-Compend, it is well to have good ones, and Dr. Morris's book is entitled to be classed in that category.

DISEASES OF THE DIGESTIVE ORGANS IN INFANCY AND CHILDHOOD.

With chapters on the Investigation of Disease; the Diet and General Management of Children, and Massage in Pediatrics. By LOUIS STARR, M. D., Late Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, etc. Second edition; illustrated. Philadelphia: P. Blakiston, Son & Co. 1891.

The study of infantile diseases has progressed wonderfully within the last few years. It is no longer competent to trust the dietary management of the infants to the garrulous old aunts and ignorant nurses that formerly assumed the control of this important field. Science and skill are now in vogue where ignorance and carelessness formerly stalked abroad. None of the recent works attracted more attention on the subject under consideration than did Dr. Starr's first edition, which has become exhausted within a few years. This second edition serves to

bring the subject forward to the present knowledge of the science, and will be read eagerly by all interested in the management of children. To our mind there is no more important department in the field of medicine, and we trust that every young physician who is training himself in the science of pediatrics will carefully study this admirable treatise.

MANUAL OF THE DOMESTIC HYGIENE OF THE CHILD. For the Use of Students, Physicians, Sanitary Officials, Teachers, and Mothers. By JULIUS UFFLEMAN, M. D., Professor of Internal Medicine at the University of Rostock. Translated, with the author's kind permission, by Harriot Ransom Wilinowski. Edited by Mary Putnam Jacobi. M. D. Octavo, pp. x. — 229. New York and London: G. P. Putnam's Sons. The Knickerbocker Press. 1891.

A few years ago such a title as this book possesses would have startled the medical world, but now it is a necessity to have a separate treatise on a subject that heretofore only commanded a chapter or two in the general treatise. Dr. Uffleman has shown his good judgment in permitting his work to be brought out in this country under such favorable auspices. Dr. Putnam Jacobi is one of the most eminent in the department of children's diseases, and has carefully edited the work so as to adapt itself to the American conditions. Every sanitarian, as well as those interested in pediatrics, should carefully study Dr. Uffleman's treatise.

SAUNDERS' POCKET MEDICAL LEXICON. Being a dictionary of words and terms used in medicine and surgery. Collected from the highest authorities, and brought up to the present date. By JOHN M. KEATING, M. D., (University of Pennsylvania,) and HENRY HAMILTON, author of A New Translation of Virgil's *Æneid* into English Rhyme, etc. Philadelphia: W. B. Saunders, 913 Walnut street. 1890.

A pocket dictionary is certainly a great convenience for students, especially when traveling. It seems to us that this is the especial use to which Dr. Keating's compilation will come. It is certainly one of the best of its kind, as the definitions are concise and clear. The type is plain and the press-work excellent. We commend it to those who need such a medical lexicon.

TEXT-BOOK OF MATERIA MEDICA FOR NURSES. Compiled by LAVINIA L. DOCK, graduate of Bellevue Training School for Nurses; Superintendent of Grace Memorial House. New York: G. P. Putnam's Sons. The Knickerbocker Press. 1890.

A new field for bookmaking has been developed since trained or educated nurses have come into vogue. We have had placed

before us, in one way or another, almost all sorts and conditions of books in which nurses are interested, but none that have so admirably touched upon *materia medica* as this one by Miss Dock. It appears, upon careful examination, to be a book that every nurse ought to possess, and to study it well after possessing it. There is scarcely a superfluous word in the book, and its 200 pages are filled with useful knowledge. It is made up in the usual good form in which the publishers present their products.

BOOKS AND PAMPHLETS RECEIVED.

A Treatise on the Diseases of the Nervous System. By William A. Hammond, M. D., Surgeon-General U. S. Army (Retired List); late Professor of Diseases of the Mind and Nervous System in the college of Physicians and Surgeons of New York, the Bellevue Hospital Medical College, the University of the City of New York, and the New York Post-Graduate Medical School and Hospital, etc. With the collaboration of Græme M. Hammond, M. D., Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School and Hospital, etc. With 118 illustrations. Ninth edition, with corrections and additions. 8vo. pp. 932. New York: D. Appleton & Company. 1891. Buffalo: Otto Ulbrich. Price, cloth, \$5.00.

Materia Medica and Therapeutics, with especial reference to the Clinical Application of Drugs. By John V. Shoemaker, A. M., M. D., Professor of *Materia Medica*, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. Volume II. of a Treatise on *Materia Medica*, Pharmacology, and Therapeutics, being an independent volume upon drugs. 8vo. pp. xx.—652. Philadelphia and London: F. A. Davis. 1891. Price, cloth, \$3.50; sheep, \$4.50.

Medical Symbolism, in Connection with Historical Studies in the Arts of Healing and Hygiene. Illustrated. By Thomas S. Sozinskey, M. D., Ph. D., author of *The Culture of Beauty*, *The Care and Culture of Children*, etc. No. 9 in the Physicians' and Students' Ready Reference Series. Philadelphia and London: F. A. Davis. 1891.

Fever: Its Pathology and Treatment by Antipyretics. Boylston Prize Essay of Harvard University, July, 1890. By Robert Amory Hare, M. D., B. Sc., Clinical Professor of Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Physician to St. Agnes Hospital and to the Children's Dispensary of the Children's Hospital, etc. No. 10 in the Physicians' and Students' Ready Reference Series. Philadelphia and London: F. A. Davis. 1891. Price, cloth, \$1.25 net.

A Practical Treatise on Diseases of the Skin. By Henry G. Piffard, M. D., Clinical Professor of Dermatology, University of the City of New York; Surgeon in charge of the New York Dispensary for Diseases of the Skin; Consulting Surgeon to Charity Hospital, etc., etc. Assisted by Robert M. Fuller, M. D. With fifty full-page original plates, and thirty-three illustrations in the text. Large quarto. pp. vi.—159. New York: D. Appleton & Company. London: Caxton House, Paternoster Square. 1891. Price, \$15.00.

The Pocket Materia Medica and Therapeutics; a Résumé of the Action and Doses of all Official and Non-official Drugs now in Common Use. By C. Henri Leonard, A. M., M. D., Professor of Medical and Surgical Diseases of Women and Clinical Gynecology in the Detroit College of Medicine. Cloth; 12mo, pp. 300. Price, postpaid, \$1.00. The Illustrated Medical Journal Company, publishers, Detroit.

Surgical Bacteriology. By N. Senn, M. D., Ph. D., Professor of Surgery in Rush Medical College, Chicago, and in the Chicago Polyclinic; Attending Surgeon to the Milwaukee Hospital; Consulting Surgeon to the Milwaukee County Hospital and to the Milwaukee County Insane Asylum; Honorary Fellow College of Physicians of Philadelphia; Permanent Member of the German Congress of Surgeons; Corresponding Member Harveian Society, London; Honorary Member of La Academia de la Medicina de Mexico, etc. Second edition, thoroughly revised. Philadelphia: Lea Brothers & Co. 1891.

International Clinics: A Quarterly of Clinical Lectures on Medicine, Surgery, Gynecology, Pediatrics, Neurology, Dermatology, Laryngology, Ophthalmology, and Otology. By professors and lecturers in the leading medical colleges of the United States, Great Britain, and Canada. Edited by John M. Keating, M. D., Philadelphia; J. P. Crozer Griffith, M. D., Philadelphia; J. Mitchell Bruce, M. D., F. R. C. P., London, Eng.; and David W. Finlay, M. D., F. R. C. P., London, Eng. April, 1891. Large octavo; pp. viii.—350. Illustrated. Philadelphia: J. B. Lippincott Company. Price, cloth, \$2.75; half leather, \$3.00.

Origin, Purpose, and Destiny of Man; or, The Philosophy of the Three Ethers. By William Thornton. 12mo, pp. 100. Boston: Published by the author. 1891.

Seventeenth Annual Report of the Secretary of the State Board of Health of the State of Michigan for the fiscal year ending June 30, 1889. Lansing, Mich.: Darius D. Thorp, Printer and Binder. 1890.

Vesico-Vaginal Fistula. With some Aberrant Cases illustrating the Cause of Leakage after Successful Closure of the Fistula—Vesical Calculi in connection with Fistula.—Utero-vaginal Fistula. By Henry Fraser Campbell, M. D., Augusta, Ga. Reprint: Transactions Southern Surgical and Gynecological Association. 1890.

Practical Notes on Urinary Analysis. By William B. Canfield, A. M., M. D., Chief of Chest Clinic and Lecturer on Clinical Medicine, University of Maryland; Visiting Physician to the Union Protestant Infirmary, Bay View Hospital, Baltimore, etc. Physicians' Leisure Library, Detroit, Mich.: George S. Davis. 1891. Price, cloth, 50 cents; paper, 25 cents.

Cosmetics. A Treatise for Physicians and Pharmacists. By Dr. Heinrich Paschkis, Docent at the University of Vienna. 8vo, pp. 210; paper. New York: William Wood & Company. 1891. Price, \$1.50.

Eleventh Inaugural Address of Clark Bell, Esq., President of the Medico-Legal Society. New York. Reprint: *The Medico-Legal Journal*, December, 1890.

Cornell University Agricultural Experiment Station. Bulletin 26. Horticultural Division. March, 1891. Experiences with Egg Plants. Ithaca: Published by the University. 1891.

CARLSBAD SPRUDEL SALTS.

FROM DR. A. W. TOLAND, TUNIS, TEX.

HAVING noticed an advertisement in several medical journals, recently, of Carlsbad Sprudel Salt, I thought to give my experience with this valuable therapeutic agent, hoping it will benefit some other poor, overworked, hill-side, saddle-riding M. D., afflicted as I was.

Last Summer, in June, while treating a camp of State convicts, in which prison epidemic dysentery was raging, I contracted the disease, which eventually assumed the chronic form, complicated with enlargement of spleen and hepatic troubles. Being always on the go, every remedy tried failed to relieve me, until I saw the advertisement of Eisner & Mendelson Co., of 6 Barclay street, New York. I sent \$1.00 for a trial bottle (they send out no *free* bottles), which came promptly to hand by express. I began taking one teaspoonful dissolved in *hot* water sufficient, adding, after it was dissolved, q. s. cold water to make three-fourths of an ordinary goblet full, drinking at one dose from one to two hours before each meal. When it was too active, I would take less. The next day I began to improve, eating as much and whatever I liked. This was about the last of September or first of October, 1890. I have been improving ever since: weigh more, digest my food better, and rest better at night than I have in the last twenty years. I sent a five-dollar note to Eisner & Mendelson Co., 6 Barclay street, New York, and they sent four (4) large bottles of the Salt, per express, in return.—*Texas Courier-Record of Medicine*.

THE SHURLY-GIBBES FORMULA FOR PULMONARY CONSUMPTION.

THERE are numerous formulæ which investigators, inspired by Koch's discoveries, have recently tested the virtue of in pulmonary consumption. Among these it may now be judiciously claimed that the utility of several, which at first proved promising, has failed to be demonstrated by experiment.

The following should be regarded as still *sub judice*: Koch's Tuberculine, Liebreich's Cantharidinæ of Potash, the transfusion of the arterial blood of the goat into the veins of the tuberculous patient, as suggested by Dr. Bernheim; the injection of the serum of dog's blood, as suggested by MM. Hericourt and Richet; the sub-cutaneous administration of gold and manganese, commended by Prof. J. B. White; Dr. Roussel's treatment by the injection of aromatic vegetable essences or perfumes. These have been tried,

and the verdict, at present, is that they have been found wanting in the anticipated specific therapeutic effect.

The most promising method is now considered to be the injection of chemically pure iodine and chloride of gold and sodium, in connection with the inhalation of chlorine gas, as commended by Dr. E. L. Shurly, Professor of Clinical Medicine and Laryngology, Detroit College of Medicine, and Dr. Heneage Gibbes, Professor of Pathology, University of Michigan.

It is vitally essential to the proper employment of these agents that the necessary solutions should be absolutely pure and of uniform quality.

Messrs. Parke, Davis & Co. announce that, at the request of Dr. Shurly, they have prepared solutions of chemically pure iodine and chloride of gold and sodium, which are put up in one ounce bottles, and will furnish physicians with clinical reports embracing the method of using these remedies.

JOSEPH P. ROSS, A. M., M. D., Professor of Clinical Medicine and Diseases of the Chest, Rush Medical College, Chicago, Ill., says: "For the past three years I have prescribed Bromidia very frequently, and have never yet been disappointed in securing the results required. In cases when there is insomnia without pain, in the delirious stages of acute fevers, in delirium tremens, puerperal mania,—in short, in all those cases requiring soporifics, I find Bromidia invaluable. I consider Bromidia an excellent combination.

OFFICE OF COWEN & COWEN, PHYSICIANS AND SURGEONS, 1
PRINCETON, Ill., April 4, 1891.

Antikamnia Chemical Company, St. Louis, Mo. :

GENTLEMEN.—Certain, safe, and marvelous in its rapidity of action, when indicated, is our opinion of Antikamnia.

DRS. COWEN & COWEN.

H. LIBERMANN, M. D., Surgeon-in-Chief, French Army, writes: "By mixing a wineglassful of Vin Mariani with half a glassful of boiling water, sweetened to the taste, makes a grog of exquisite flavor, rendering the greatest services whenever an immediate effect is desired, in severe cases of cold attended by convulsive coughing."

* * * * *

In the recent epidemic of influenza in France, Vin Mariani has been the tonic absolutely relied upon by the medical profession in general. (Besides the medical press, see *Paris Figaro*, December 12, 1889, and *New York Herald*, December 25, 1889.)

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Original Communications.

SUBCLAVICULAR DISLOCATION OF THE HUMERUS — OPEN ARTHROTOMY — RECOVERY.¹

By JOHN PARMENTER, M. D.,

Professor of Anatomy in the Medical Department, University of Buffalo; Surgeon to the Fitch Hospital; Assistant Surgeon to the General Hospital.

THE rarity of the form of dislocation under consideration, and the unusual method of reduction, are my reasons for intruding upon you so old a subject as dislocation of the shoulder joint.

This joint—a typical ball and socket joint—depends for its integrity, not upon bony conformation, nor upon strong ligaments, but rather upon the muscular attachments connecting the humerus with the trunk. This dependence upon muscles, together with such conditions as a shallow glenoid fossa, a disproportionately large humeral head as compared with the fossa, a weak capsular ligament, and the extensive movements of the arms, combine to make the joint more or less insecure, and more prone to dislocation than any other in the whole body.

The subclavicular variety belongs to the class of forward dislocations, and is one of very great rarity, many of the cases described under this head being really subcoracoid. The head escapes underneath the coracoid process, and can be found under the clavicle and in close relation with its inferior edge. It is quite essential to remember this in making a differential diagnosis between these two forms of dislocation, which in other respects very closely resemble each other. The head and neck lie behind the pectoralis minor, the short head of the biceps, and the coracobrachialis muscles, or sometimes between these muscles and the serratus magnus. The deltoid, supra- and infra-spinatus, and the subscapularis are put in a condition of more or less extreme ten-

1. Read at the April, 1891, meeting of the Buffalo Medical and Surgical Association.

sion, the tendons of all (the deltoid excepted) being in some cases completely torn across. The damage done to contiguous parts may likewise be great. The axillary nerves may be pushed ahead of the bone, the capsule extensively torn, and the circumflex nerve so injured as to paralyze the deltoid. Such accidents, however, are not common, and in this respect the *forward* are less serious than the downward dislocations. On the other hand, let me add, parenthetically, the forward dislocations, especially the subclavicular, as a class, are distinctly more difficult to reduce than the downward variety. The reasons for this are not always easy to give; but, perhaps, the following explanation may not be far amiss. Soon after the accident, the muscles about the joint have become more or less firmly contracted, thus pulling the head of the humerus closely against the clavicle. When attempts at reduction are made, the great resistance of the muscles and the impinging of the humeral head against the coracoid process combine to prevent the head from entering the glenoid cavity. Add to this the condition of "button-holing," as it is called, where the head has slipped through a small rent in the capsule, and the latter becomes firmly applied to the neck of the humerus, and the difficulties of the case become very much increased. To be sure, this "button-holing" may occur in other shoulder dislocations, but the capsule is considerably more resisting toward the front than downward, and, therefore, is not so liable to be extensively torn as in dislocations into the axilla. Furthermore, the untorn and posterior part of the capsule may add to the resistance in the forward dislocation; so that, when one or more of these conditions exist, we find forward dislocations oftentimes presenting great difficulties in the way of reduction. Do not think, however, that all forward dislocations are so refractory. Many are as easy of reduction as any other form, and this is as true of the subclavicular as of the subcoracoid variety. Bostock reduced a subclavicular luxation of eight years' duration within fifteen minutes, and without an anesthetic.

Let us now suppose that our diagnosis has been made, and that we are employing the usual methods of reducing shoulder dislocations, such as extension in various directions, and some of the different methods by manipulation—when are we to stop? Or, to put it in another way, what are the contra-indications to too prolonged or violent attempts to restore the head of the bone to the glenoid fossa? We know that many and fatal accidents have resulted from injudicious efforts in this direction; such, for

instance, as rupture of the axillary artery or vein, or both ; injury to the axillary nerves and to the soft parts, causing either immediate irreparable damage or subsequent destructive inflammation; and, finally, fracture of the neck or shaft of the humerus.

Having in mind the accidents that may occur, we understand as a contra-indication any condition which predisposes to or makes liable the occurrence of such accidents. A moment's thought will suggest some of these contra-indications to us. For instance, old age, with its attendant brittleness of bone and degenerative changes in the arteries, may the more easily make the patient undergo a fracture of the humerus, or rupture of the axillary artery. So, also, Bright's disease, or syphilis, may have caused a chronic endarteritis with atheromatous changes in the arterial vessels, and thus predispose to rupture of the axillary. Chronic alcoholism, for the same reason. Again, the time during which the luxation has remained unreduced may contra-indicate too violent or prolonged, or, if sufficient time has gone by, (say six months, on an average, for the shoulder joint,) any attempt at all at reduction. The above-mentioned conditions, then, are among the chief ones which we must have in mind when choosing how we shall reduce a dislocation of the shoulder, or in deciding how long and with how much force we may safely continue our efforts.

Let me now briefly relate the case under consideration, and apply to it such of the principles as have already been considered and are applicable to the case :

B. M., fifty years old : Irish : laborer. Has for many years been addicted to drink. Admitted to the Fitch Hospital, October 28, 1890, at three P. M. The following history was obtained : One week previously, fell and struck upon *shoulder* (existing mental confusion makes this a matter of conjecture). A few hours later he discovered something wrong with his arm, and sought the advice of a physician, who attempted, unsuccessfully, to reduce the luxation. Two or three days then elapsed, when another physician tried reduction, with the same result. On the day of admission he had been seen by two more medical gentlemen, who used their combined efforts for two hours to put the head of the bone in place, without avail. Admitted to the hospital, my house surgeon tried for nearly an hour to reduce it, and, not succeeding, sent for me. Examination showed a tumor, most prominent about the junction of the middle and outer third of the clavicle, and closely applied to its under surface. The other typical signs of dislocation were also present, except the arm was more abducted and the head of the humerus much more fixed than usual. *Diagnosis made*, the

man's general condition was noted, and revealed evidences of exhaustion, such as weak and somewhat irregular pulse — 100 in frequency; his arteries (radials and temporals) markedly atheromatous, arcs senilis very distinct, and the general evidences of a too liberal and prolonged use of stimulants. He was again chloroformed, and during the next hour I tried every known method of bloodless reduction, including a most faithful use of Kocher's method, which I regard as the one most successful in a given number of cases, as compared with other methods. Open arthrotomy was then determined upon, and for the following reasons: First, the man was becoming exhausted, and needed either speedy relief or to be let alone with a useless arm. (The great deviation of the arm from the normal, and its unusual fixity in this abnormal position, made it certain that he could not use the arm in work.) Second, the condition of his arteries. Third, his being older even than his years; and fourth, the great fixity of the head of the humerus.

An incision, between four and five inches long, was made in the substance of the deltoid, toward its anterior border, to better avoid branches of the circumflex nerve. The capsule reached, a further but fruitless effort was made to get the bone in place. The joint was then opened, and the following conditions found present. The neck was tightly grasped by the capsule, the supra- and infra-spinatus and the subscapularis muscles very tense; the long biceps tendon lay tensely stretched across the greater tuberosity, it having been thrown out of its groove. It seemed, thus, that the supra- and infra-spinatus and subscapularis muscles held the head of the humerus tightly pulled against both coracoid process and clavicle, while the biceps tendon strapped it down from in front. The hole in the capsule was enlarged, and an attempt at reduction made. Not, however, until the subscapularis and spinatus muscles were divided at their insertions was reduction possible, and then only with difficulty. The wound was dressed antiseptically, no drainage being used, except some superficial catgut strands, on account of the edema about the parts, from the manipulation they had undergone. The case progressed favorably, except for the first few days there was some afternoon rise in temperature and restlessness, due to his alcoholic habits. The parts looked red and swollen, but aspiration gave no evidence of pus, and his speedy recovery under mercurial ointment showed conclusively that none existed. At the end of three weeks, passive motion was commenced until he could use his arm freely in all directions, except raising it to a right angle, owing to paralysis of the deltoid. Whether this was due to the original injury or to the operation, I cannot say positively, but it happens so frequently in injuries about the joint, where no cutting has been done, that I feel quite certain that it was due to the original injury. (I have seen paralysis of the deltoid from a blow received in boxing.) He can now, six months

after operation, move his arm in all directions, except such movements as the deltoid executes. There is very little grating in the joint, and in all respects it seems quite normal. As for the deltoid paralysis, his age and habits make it exceedingly unlikely that he will ever be better in this respect. There has, however, been comparatively little atrophy of this muscle, and the compensatory action of other muscles enables him to use his arm to good advantage.

And now a few words concerning open arthrotomy as a method of reduction in luxations, irreducible by other means. What have been the results of the employment of this method? What are the dangers? These are important questions, and must be considered in making up our estimate of the advisability of its employment. For the literature upon this subject I am much indebted to an article in Brun's *Beitrage zur klinischen Chirurgie* for 1889, Vol. IV., page 372, by Dr. O. Knapp, of Stuttgart. He considers four methods of operative reduction—viz., subcutaneous division of the soft parts about the head, subcutaneous osteotomy of the head, open arthrotomy, and resection of the head.

Only open arthrotomy concerns us here, interesting as it would be to give his views and statistics upon the other methods. He has collected twelve cases in which the luxation had existed from six weeks to two years. Of these twelve cases, two ended fatally (one from delirium tremens and one from suppuration). Of the remaining ten: in one, there was a pseudarthrosis in the surgical neck; in three, necrosis of the head, requiring subsequent extraction; in four, material functional improvement; while the remaining two were too incomplete to base deductions upon. He compares then the statistics of resection with those of open arthrotomy. In twenty cases, four died and six were incomplete. In the remaining ten cases the results were in some equal to, in others better than those in which arthrotomy had been done. From his study of these various methods and their results, he concludes that subcutaneous section of soft parts, or subcutaneous osteotomy, are both unworthy of general acceptance, notwithstanding the fact that they have, at times, yielded good results; and as regards the other method, that it will be advisable to make open arthrotomy only in recent cases—to resect in ancient and neglected cases.

Lister (*Brit. Med. Jour.*, Jan. 4, 1890,) has reported two cases, one of two and the other of seven months' duration. In both the results were excellent, the patients earning their living by hard manual labor.

König says :

Up to now not much has resulted from attempts at bloody reduction. still it is possible that with a better understanding of the conditions which hinder reposition, the results will be better.

In the last (1890) edition of *Hamilton's Fractures and Dislocations*, Stimson has remarked parenthetically that "open arthrotomy has been practised with a gratifying measure of success, and with antiseptic precautions gives promise of being an accepted method." He relates successful cases of Dr. Heron Watson, who operated four weeks after accident, and Dr. Garmany upon a recent case. (Time not given.) To this list can be added the one detailed tonight. Standard surgical works are quite silent on the subject.

The results, then, it seems to me, while no means perfect, are most encouraging, and justify further careful and intelligent use of the method.

What are the dangers ?

Suppuration, either from a lack of proper antiseptics or from the presence of chipped-off fragments in the joints. This has happened in the hands of careful and most experienced operators, (Brun's, for example,) and is, in some instances, presumably due not to infection but to necrosis of fragments, which had been separated from their connections during operative manipulations and have escaped notice. Necrosis of the whole head has also occurred. The breaking up of adhesions and putting the head in a new environment has caused this accident in three cases.

Again, there is danger of ankylosis, which may restrict the motions of the extremity much more than did the original condition.

In a case operated upon with strict antiseptis precautions, thus eliminating suppuration by infection from without, these dangers belong almost entirely to the ancient and neglected cases. In a case, recent as my own, for instance, no adhesions worthy of mention can exist, the glenoid fossa is still normal, likewise the head of the humerus, and hence a good result is rather to be expected than otherwise. It is the only one, as far as I can discover, operated upon so early after dislocation. Watson's case of four weeks, standing being the next earliest.

It was but a few days ago that our President kindly asked me to read a paper this evening, and this fact, together with press of other work, has prevented me from making a very thorough examination of the literature bearing upon the subject. A fairly good search through standard works and journals, including the Index

Medicus, gives only the sixteen cases I have mentioned. If to this we add the one considered tonight, we have seventeen in all.

Such a number is far too small to base positive deductions upon, but, it seems to me, that a successful result in a case like my own, in which so many unfavorable conditions existed, is stronger testimony for the safety and efficiency of the method than can ordinarily be claimed from one case. To my mind it is equivalent in this respect to a number of cases in whom youth and health exist, to aid the surgeon in obtaining a good result.

Regarding open arthrotomy the following conclusions seem proper:

1. Carefully and aseptically performed open arthrotomy is safe and ordinarily efficient.
2. It should be employed only in recent cases.
3. When in any case it does not prove efficient, resection can be done through the same incision.

372 FRANKLIN STREET.

BACTERIA AND THEIR RELATIONS TO CERTAIN DISEASES.¹

BY CHARLES SETH EVANS, B. S., M. D., Cincinnati, O.

BACTERIA, microorganisms and germs are synonyms for a large family of extremely small, microscopical organisms. They belong, undoubtedly, to the vegetable kingdom, where they occupy the lowest position.

Structurally they are cells, and consist of a cell wall, said to contain cellulose, and cell contents; a nucleus is not known to exist, though certain varieties of bacteria do, under favorable circumstances, develop in the cell contents a body which possesses certain points of analogy to a nucleus.

Microorganisms abound in nature; countless myriads of them are to be found wherever there is animal or vegetable life, or decay. We ourselves swarm with them, our skins are alive, our intestinal tracts, with the exception of the stomach, and this exception has its exceptions, seems to contain more germs than anything else. And, in all probability, they are not such infrequent guests of our tissues.

The work they do and the part they play in the economy of nature should not be underrated. As a class, they do us much

1. Read before the Alumni Association of Niagara University, April 14, 1901.

more good than harm. They are the tireless workers in Nature's laboratory, without which we, and all animal and vegetable life, would die, for they alone prepare the food for the plant life, on which all animal life ultimately depends. They, the simplest of plant life, possess the peculiar property of not only being able to live on the higher forms of both animal and vegetable life, but in so doing to decompose their complex structures into such simpler compounds and elements as may, in their turn, serve as food for higher plants.

As to the classification of germs, it has been found convenient to divide them into —

First.—Moulds (Schimmelpilze), or Hypomycetes.

Second.—Yeasts (Hefepilze), or Blastomycetes.

Third.—Bacteria (Spaltpilze), Schizomycetes.

It is with the third class, the bacteria or schizomycetes, that we, as physicians, not botanists, have the most to do, and which possess for us the most interest. One word in general : we do not admit that spontaneous generation can occur ; we also hold that the various varieties of bacteria are distinct.

In classifying bacteria the first and most natural system is that based on form. It gives us (1) the bacillus, or rod-shaped cell ; (2) the coccus, or ball ; (3) the spirillum, or screw-shape — forms, which have been compared to a billiard cue, a ball and a corkscrew. It must be remembered that a bacillus is really a cylinder, and not a line ; that a coccus is really a sphere, and not flat like a griddle cake ; and a spirillum is but a twisted cylinder.

As to whether the bacteria live on dead or live substances, we divide them into saprophytes and parasites. Of the parasites it has been found convenient to make two classes : the one which cannot live and multiply outside of the animal body is called obligatory parasites ; the other, which, under favorable circumstances, can adapt itself to a life either within or outside of the animal body, we know as facultative parasites.

Disease-producing bacteria are known as pathogenic ; that they may act in either a septic (toxic) or infectious manner has long been supposed, but is now definitely known.

Bacteria multiply by fission with the most surprising rapidity. Flügge observed complete division in cocci in twenty minutes ; and Cohn estimated that, did it take an hour for complete division and for the new cells to attain maturity, one coccus would, at the end of the first day, have produced sixteen and a half millions ; at the

end of the second day, 281 billions; and at end of the third day, forty-seven trillions, and at the end of the fifth day the number would be so great that all the oceans of the globe, did they have a uniform depth of one mile, would be filled.

Bacilli also germinate by means of sporulation: this process is not known to occur in the cocci and spirilli. By it we mean the formation of small, more or less round, highly refracting bodies in the bacilli. They are probably to be regarded as the seed of the plant; certainly like grains of wheat they retain the power of germination an almost indefinite period. What interests us most is the part these bacteria play, and how they play it, in the causation of disease.

We can imagine three possibilities:

First.—By appropriating, for their own growth, sufficient nutritive material to starve the tissues.

Second.—By their large number mechanically blocking the vessels.

Third.—By producing in the process of development, from the complex albuminoids in which they live, other and toxic substances, which, becoming absorbed, act on the general system.

It is especially the latter view to which we are leaning more and more, and already a long list of these so-called ptomaines, or toxalbumins, have been isolated, some of which we know as *tetanine*, *cadavarine*, *neurine*, *muscarine*, *mythelotoxin*, *tyrotoxicum*.

Recent experiments have settled beyond a doubt that not only the systemic effects of certain bacteria are due to the ptomaines they generate, but that the local effects are likewise dependent upon the same cause.

And still more recent experiments have shown that acquired immunity, and immunity due to inoculation with attenuated cultures, are intimately associated with the same substances.

Other investigators have demonstrated that bacteria, even pathogenic ones, are not such infrequent inhabitants of the normal tissues. As to how these bacteria are disposed of—for they, like those introduced by inoculation, soon disappear, and need not produce any symptoms, much less the disease of which they may be the cause—the theory of Metchnikoff or phagocytosis, has found rapid and widespread approbation. According to it, the leucocytes, and cells of the adenoid tissue possess the peculiar property of ingesting and digesting bacteria. Thus, it would seem, there is a constant fight going on between the phagocytes and the

bacteria. If the bacteria are overcome, devoured by their enemies, the tissues continue in a healthy state; if the bacteria are victorious, then disease results.

The probability is that the leucocytes play*the part of buriers of the dead rather than soldiers; and should a live bacterium be swallowed by mistake, the life of the cell pays the forfeit.

The more probable explanation is that of Petruschky, who has shown that the normal blood serum, deprived of all white cells, possesses the property of killing bacteria in limited number; that those animals which are congenitally immune to certain diseases, such as white mice and rats to anthrax, have a blood serum which possesses this property in a marked degree. He has further shown that these animals and others, such as rabbits to the staphylococcus albus, may be rendered temporarily susceptible by altering the character of their blood serum; thus, white mice and rats lose their immunity to anthrax when the alkalinity of their blood serum is diminished, and rabbits become susceptible to the staphylococcus albus when a condition of diabetes is induced.

Bacteria, according to Wyssokowitsch, are not eliminated by the secretory organs.

In the production of disease by bacteria, much depends not alone on the specific character of the germs, but on their individual virulency, on their number and on their position in the tissues, as well as on the resistance which the tissues offer; on the temperature and on the barometer.

Thus, Watson Cheyne found that in rabbits, to produce a rapidly fatal result, he must inject about one billion pus cocci, while 250 millions caused only a small abscess. With the tetanus bacillus, also on rabbits, 1,000 were necessary to produce death.

As to the virulence of the bacteria, the well-known experiments of Pasteur have familiarized us with the attenuated viruses or vaccines. We know, further, that in the abnormal, hot-house growth which we obtain of bacteria in our culture media, a diminution in the virulence is far from uncommon, also that various physical conditions as well as the chemical composition of the media may bring about this result, but it is only of late that we are beginning to understand why this is so. That it is due to the formation of toxalbumins, ptomaines, which so modify the growth as to, more or less completely, cause the pathogenic variety to once more assume the harmless habits of the saphrophyte, from which it must at some time or other have departed.

As to position in the tissues, those floating in the blood do less harm than those lodged in the tissues.

The effects of inflammation of a low grade has been shown by Max Schüller, and very recently by Watson Cheyne. They, after inoculating animals with tubercle bacilli, produced slight subcutaneous injuries, such as contusions and sprains, and found that localization generally occurred at the injured part.

Rosenberg, Hocker, Becker, Krämer and Cheyne obtained about the same result in producing acute osteomyelitis with the pus formers.

THE RELATION OF BACTERIA TO THE FORMATION OF PUS.

The mycotic origin of pus was definitely settled by Ogsten in 1881, though Klebs years before, had come to the same conclusion.

Today we recognize as pus formers—

First.—*Staphylococcus pyogenes aureus*.

Second.—*Staphylococcus pyogenes albus*.

Third.—*Staphylococcus pyogenes citreus*.

Fourth.—*Streptococcus pyogenes*.

Fifth.—*Bacillus pyogenes fetidis*.

Sixth.—*Gonococcus* of Neisser.

Seventh.—*Micrococcus tetragenus*.

And as rarer forms the *staphylococcus pyogenes cereus albus* and *cereus flavus*, and *staphylococcus pyogenes flavescent*. By some observers the *bacillus pyogenus* is also regarded as a pus former.

The *bacillus tuberculosis* does not belong to this class. Of these, by far the most frequently met with are the *staphylococci aureus* and *albus*, the *streptococcus pyogenes* and the *gonococcus*.

The question immediately arises: Can the formation of pus be caused by other substances than the foregoing microorganisms?

There seems to be but two possible ways in which this might occur: either from other microorganisms as yet unknown or not settled as having this pus-forming property or from chemicals.

That pus may be formed by chemical action on the tissues has been determined: thus, croton oil, metallic mercury, or turpentine, rendered sterile, placed in sterilized glass tears, and these by an aseptic operation made to heal in under the skin of animals, will there remain inactive as long as the tear is unbroken; but, however, on breaking the tear, pus is formed, in small quantities it is true, yet, chemically and microscopical —a. Clinically, this pus

can hardly be said to occur, for it is a sterile pus, does not contain a single microorganism, and does not tend to invade the tissues

Grawitz and de Bary have gone one step further, and have produced pus by the subcutaneous application of the toxalbumins derived from the pus formers themselves. The ptomaines were obtained from pure cultures and rendered perfectly sterile.

This, of course, is but another example of chemical irritants producing pus, but is of much more significance than the action of croton oil, for it explains how the pus formers do their work. The microorganisms generate the ptomaines, and the ptomaines by their chemical action on the tissues cause the formation of the pus.

That the microorganisms are the true and specific cause of supuration, is proven beyond a doubt. The chain of evidence is complete. All infectious pus contains bacteria which have been cultivated, through many generations, outside the body, in pure cultures, and on inoculation with these pure cultures pus has again been formed, and the same germs found in the pus so formed.

On man these inoculations have been performed by Garré, who rubbed a quantity of a pure culture of the *staphylococcus aureus* into the skin of his forearm and it took weeks for the resulting carbuncle to heal.

Some inoculation experiments have failed, owing to some error in the technique, using too small a number of germs, or those which from abnormal conditions in which they are grown outside the body, had lost their virulence.

At other times abscesses have been found which contained none of the pus formers. These are almost invariably "tubercular abscesses;" when not, it is highly probable that a portion of the pus was selected in which all the germs had died—killed by their own secretions.

As a rule, the infections due to the *streptococcus pyogenes* are more serious than those due to the *staphylococcus*. This is probably because the former tends to spread along the lymph spaces, to involve more area and show less tendency to become limited.

RELATIONS OF BACTERIA TO DIPHTHERIA.

Loeffler found in the membrane of diphtheria, but absent in the blood and tissues, a bacillus. This bacillus, he maintained, occurred regularly in every case of diphtheria, and this statement has been substantiated by Babes, Kolisko, Paltauf and others.

Loeffler himself was very reserved about declaring his bacillus

as the specific cause of diphtheria, but more recent experiments by Roux and Yersin have settled the question definitely; so that we may now regard the bacillus of Loeffler as the true cause of diphtheria in man.

The bacilli have about the average length of tubercle bacilli, but are nearly twice as broad. The form, however, is subject to variations, such as thickening of one end, transverse markings, etc.

Loeffler's bacillus does not form spores.

Cultures obtained from diphtheritic membranes do not, at first, grow well on our culture media, but seem in the course of three or four generations to become accustomed to their new food and then grow luxuriantly, though they at the same time lose their virulence.

Inoculation experiments on man have not as yet been made. On animals they soon developed the fact that not a few species possess immunity. Mice and rats will not become infected, while most birds, especially pigeons and chickens, and usually rabbits and guinea pigs, are susceptible.

On rabbits the inoculation experiments are especially interesting. They are ill for days and even weeks, thus giving time for the development of the general symptoms, the occurrence of paralysis.

The purely local occurrence of the bacilli and the severe general symptoms are best explained on the hypothesis that the bacilli, in their growth, generate a soluble substance capable of producing the systemic disturbance.

Roux and Yersin found that the sterile filtrate made from pure cultures, which were not too young, possessed the power of producing in animals, when injected subcutaneously or into the blood current, the same symptoms as do inoculations with pure cultures. No membrane occurs on the mucous surfaces, but the paralyzes do occur and are usually fatal.

The larger the dose the more rapidly death ensues, but when small doses are employed, then the paralyzes follow only after the lapse of many days or even weeks.

The diphtheria ptomaine is a modified albumin derived from the normal albumin of the tissues. It must, however, be noted that, clinically, the bacilli of diphtheria never occur alone, but are almost invariably associated with *streptococci*. This mixed infection is certainly important, and many observers maintain that especially fatal cases owe their virulence to the associated microorganisms.

INTUBATION IN SPECIFIC STENOSIS OF THE LARYNX.

By JOHN O. ROE, M. D., Rochester, N. Y.

IN the afternoon of the second of last February, I was hastily sent for by Dr. Rutherford, of Rochester, to see, with him, a patient who was suffering from great dyspnea.

I found on my arrival a woman about forty years of age, who was so much oppressed for breath that she was quite cyanotic. Hastily examining her larynx I found it almost entirely occluded by a sub-glottic swelling, projecting from the left side of the larynx and pressing the left vocal cord upwards so as to give it quite a bulging appearance.

The swelling was quite firm, and from its appearance unquestionably a gummata.

This diagnosis was supported by the history of the patient and the presence of active syphilitic manifestations on other portions of the body at that time.

In order to avoid the operation of tracheotomy, I endeavored to cut away enough of the growth to give a free breathing space, but this could not readily be done without lacerating the left vocal cord, and I resorted to the expedient of introducing an intubation tube of an adult female size. The tube was of metal with hard-rubber head.

In order to introduce the tube past the growth, I had to use considerable force, but when the tube was in situ the dyspnea at once disappeared, and breathing was carried on through the tube with perfect freedom.

The patient got on admirably. She had no discomfort from the tube after the first day, when the sensation of pressure disappeared and deglutition even was very little interfered with by the presence of the tube.

The history of the case previous to the time I saw the patient is as follows :

About three years ago she was inoculated with a specific infection. This was soon after followed by an eruption and a conjunctivitis of the left eye : and afterwards at frequent intervals small patches of eruption would appear on various portions of the body, arms, legs, neck, face, etc., but confined mainly to the left side.

These small patches of eruption of a rupia nature would break down, suppurate, and after a time heal, leaving a scar, while other ulcers

1. Read before the Central and Western New York Medical Association, held in Buffalo, N. Y., June 2, 1891.

formed at different places in the same manner. When I saw her, there was one just above the left eye, one on the left shoulder and one on the left hip, which were all discharging quite profusely.

In February, 1890, during the first appearance of La Grippe, she began to be hoarse and to have some difficulty in breathing, which she attributed to an attack of the epidemic.

The trouble in breathing, however, slowly increased and by the last of December she began to have attacks of extreme dyspnea, particularly during the night, and for two or three days before I saw her she had become so choked that she was thought several times to be dying.

She was up to the time that Dr. Rutherford was called in (who at once recognized the formidable character of the laryngeal obstruction), in the hands of an irregular practitioner, who, it seems, knew the nature of the disease, but not enough to master it.

The patient was put on eighty grains of iodide of potassium daily, in conjunction with iodide of mercury. She improved rapidly, and in four days the tube was so loose that she coughed it out. Replacing it was not necessary, as the growth was very much reduced in size, owing to the combined influence of the pressure of the tube and the constitutional effect of the medicine. Every second day, applications of nitrate of silver, forty grains to the ounce, were made to the growth to stimulate and hasten its absorption, and at the end of four weeks it had nearly disappeared.

When I first saw the patient she could scarcely produce an articulate sound ; at the end of four weeks her voice had become a hoarse whisper and at the present time little hoarseness remains. There is some inflammatory thickening about the larynx, but the gummy growth has entirely disappeared.

The foregoing case is one of more than passing interest, since it illustrates so clearly the brilliant results that attend intubation of the larynx for obstructions due to chronic hyperplasia and new formations, as well as for stenosis of the larynx of an acute inflammatory nature.

Thus far I have found records of ten cases in which intubation has been employed for syphilitic obstructions of the larynx. Two of them were for acute syphilitic stenosis of the larynx, in which condylomata and gummata were present ; two for chronic syphilitic stenosis of the larynx, with hypertrophy and ulceration ; three for cicatricial stenosis of the larynx, following ulceration ; two for chronic syphilitic stenosis of the larynx, with bilateral paralysis of the abductors, in one of which there was also cicatricial adhesion of the vocal cords, and one for acute syphilitic stenosis of the larynx, with perichondritis and ankylosis of the arytenoids.

In all these cases, as in the case I have just reported, complete relief and cure followed the introduction of the tube.

The advantages of this method are: The operation is quickly done; it is quite free from danger; it avoids the formidable operation of tracheotomy with all its attending sequelæ, and it is the most efficient method of dilatation.

Previously, the only method of any value whatever for dilatation of cicatricial stenosis of the larynx was that of Prof. Shrøtter, and this was not always satisfactory, and, besides, required tracheotomy for the introduction of the dilator.

28 NORTH CLINTON STREET.

Society Proceedings.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON ORTHOPEDIC SURGERY.

Stated Meeting, April 17, 1891.

SAMUEL KETCH, M. D., Chairman.

OBSCURÉ DISEASE OF THE HIP.

Dr. H. L. TAYLOR presented for diagnosis the case of a boy who was taken suddenly sick, without known cause, on September 12th last, with a chill and irregular fever, which was soon followed by severe pain and swelling about the upper part of the thigh, especially in front. He was examined late in November, when he presented hardness and swelling of the upper part of the thigh with some edema, and, at times, below the knee; there was fluctuation on the outer aspect of the thigh, five inches below the anterior superior spine, and a tablespoonful of serum was several times withdrawn. The thigh was extremely flexed, abducted and everted, and there was but little hip motion, but no muscular spasm. The patient improved in health rapidly, the inflammatory symptoms subsided, and the deformity was reduced to a moderate one, by rest in bed with gentle counter-extension. The patient now walked with a considerable limp, but without support. There was a large, hard swelling connected with the right side of the pelvis, found on pressing above Poupart's ligament, and also above and in front of the hip. The patient's health was good.

Dr. A. B. JUDSON thought that the abduction and fixation

present, indicated articular osteitis of the hip, obscured in this case by unusual deportment of the abscesses.

THE CHAIRMAN thought it was very unusual for hip disease to come on with such sub-acute symptoms, and the history seemed to point rather to some infectious disease than to a chronic joint lesion.

KNEE- AND ANKLE-JOINT DISEASE IN INFANTS.

Dr. ROYAL WHITMAN presented a series of cases illustrating the treatment of knee- and ankle-joint disease in young infants, by an adaptation of Thomas's splint. He claimed that by the routine use of extension, not merely for its effect on the contracted knee and as a factor in the production of rest, but for the purpose of retaining the brace in position, instead of using the ordinary shoulder strap, the constant shifting of the ring, which occurs in infants, is avoided, and hence the irritation of the skin, and motion at the diseased joint were reduced to a minimum. He advised the use of the brace in cases of ankle-joint disease, even when the infant had not begun to walk, on the principle that children long before they walk are making constant attempts to stand, and in creeping or otherwise, expose the joint to injury.

The brace is made of light material, with two leather straps attached to the foot-bar. The extension plaster is applied to the leg, usually below the knee, and the leg is firmly bandaged from the toes to the groin, and the brace applied with sufficient extension to hold the ring firmly in its place. The leg and brace are then firmly bandaged to the acetabulum from the foot to the ring. Such an arrangement provides rest, compression and protection, the effect of which in painful, contracted and suppurating joints is at once apparent. In ankle-joint disease the foot being at a right angle to the leg, a volar leg plaster bandage is first applied.

It seemed to the speaker that the treatment of joint disease in infancy should be carried out on the same principles as apply to older children, and that in cases of knee- and ankle-joint disease the conditions are most satisfactorily met by the Thomas brace. With ordinary care the case can be attended with no difficulty, and it was not unusual to see infants of from fifteen to eighteen months of age, walking about in the brace and high shoe without discomfort.

Dr. V. P. GRANGER said that his clinical experience had taught him that it was almost impossible to hold the limb down with

plaster-of-Paris in these small children; for, notwithstanding the performance of tenotomies, as soon as the plaster becomes soft, which it will do speedily as a result of the dribbling of the urine, and from other causes, the limb will begin to flex again. This adaptation of the Thomas splint he considered an admirable one.

Dr. JOHN RIDLON said that this method of employing traction had been used by Thomas years ago, but more recently that surgeon had preferred to straighten the cases with or without an anesthetic, and then put them up permanently in a straight position with absolute immobilization, and with as much traction as could be obtained by a full-length caliper splint. He thought that direct backward pressure, with a pad above and below the knee, and a strap behind the knee, was better than the method of bandaging adopted in one of the cases presented. For the ankle-joint cases, he thought a metal splint was more satisfactory than the plaster-of-Paris. He had repeatedly tried plaster-of-Paris in these cases, and had found that it failed to keep the limb straight.

Dr. JUDSON doubted whether in larger children the splint shown could be relied on to secure both fixation and protection.

Dr. A. M. PHELPS disagreed entirely with Dr. Ridlon as to the superiority of a metal splint over the plaster-of-Paris. He had used the Thomas splint for the past four years as a protection to the joint, but he did not approve of producing extension by it, as this caused intra-articular pressure. His plan was to reduce the deformity under ether, and then apply plaster-of-Paris. He did not think the splint exhibited was any better than plaster-of-Paris for small children before they began to walk.

Dr. W. R. TOWNSEND said that it was because they had experienced so much trouble from excoriations in the use of plaster-of-Paris at the hospital, that Dr. Whitman had devised this arrangement.

Dr. N. M. SHAFFER saw no necessity for either this splint or for plaster-of-Paris. There had been no trouble from the apparatus which he had employed in his practice, and he thought it gave even better protection than the Thomas splint. The deformity is usually made too important a factor in the treatment. A study of Nature's methods would show that the deformity should be reduced by modifying rather than by increasing the intra-articular pressure, and Dr. Whitman committed an error in attempting to reduce the deformity quickly; for, in the majority of cases, Nature

endeavored to warn us against this rapid reduction of the deformity by establishing a condition of muscular resistance. The slow method of reducing the deformity, in his opinion, gave better ultimate results.

THE CHAIRMAN endorsed the views of the previous speaker. Some of these cases had been stated not to have had reflex spasm, but he could not understand how this could be the case, as, in his experience, spasm had been invariably present. The apparatus acted upon the principle of the simple perineal crutch, and only emphasized the necessity for using this crutch in all these cases.

Dr. WHITMAN, in closing, said that the only claim to originality which he made, was in the manner of holding the brace firmly against the groin. He was fully convinced that plaster-of-Paris was very undesirable for young infants, as the joint was often swollen to the size of the thigh, and the plaster speedily worked down and became loose. However beautiful might be the theory of increasing the intra-articular pressure by traction made with this splint, the fact still remained, that while the limb was being brought down these children were comfortable, their general condition improved, and the joint diminished in size. The bandaging to which Dr. Ridlon alluded was not for the purpose of straightening the leg, but to hold the brace firmly. He considered that the deformity *was* of much importance, and that the sooner it was reduced, especially in knee disease, the better. If seen moderately early, one could be sure that recovery without deformity would occur, with the exception of some shortening.

ANTERIOR POLIOMYELITIS.

Dr. GIBNEY presented a case of anterior poliomyelitis, which had so affected the abductor group of muscles as to cause marked deformity of the limb. When six years old, the patient was reported to have had a high fever, accompanied by inability to move the legs. This condition rapidly improved, and then it was noticed that the child could use the limbs but little. He had first seen the case on November 16, 1887, at which time there was complete adduction of the limb, the hamstrings were considerably shortened, and there was some flexion at the hip. Shortly after he began treatment by stretching the hamstrings, the case passed under the care of a distinguished general surgeon, who presented her to the Surgical Society as a case of congenital dislocation of the hip. She returned after a time, and the extension was resumed. On

November 22, 1889, she was anesthetised, and, by an open incision over the tensor vaginæ femoris and flexors of the thigh, he was able to divide freely the contracted tissues, until the limb could be brought into good position, when he applied plaster-of-Paris from the axilla to the toes. After two or three weeks, a brace was applied. On October 22d, another operation was necessary. On March 26, 1890, the limbs were parallel, and at present it is difficult to produce any luxation of the hip-joint, the limbs are of equal length, and the child can walk fairly well without any apparatus. He thought the case showed the advantages of protecting the weakened muscles for a long time.

Dr. SHAFFER said that he wished to emphasize the important part played by the tensor vaginæ femoris, this muscle and the sartorius often being the principal opponents to good locomotion. He had seen several cases in which the general surgeon had made a diagnosis of dislocation of the hip, owing to the extreme malposition of the thigh. Division of the tensor vaginæ femoris, and of the muscles attached to the anterior spine of the ilium, is the only method of treating these cases successfully, and, in order that the division be thorough, he preferred the open method to the subcutaneous.

ARREST OF DEVELOPMENT.

Dr. GIBNEY presented two cases: In the first, in addition to some deformity of the hands, the patella and knee joints were rudimentary. There was limitation of motion and rotation inwards of the femur, and outward rotation of the tibia, and the patella was displaced to the outer side of the femur. There was the usual marked degree of knock-knee, and the double congenital equinovarus. She was admitted to the hospital on June 18, 1889; at that time she was eight years of age, and in good general condition. After a number of tenotomies and other minor operations, it was found that although there was some improvement, there was still marked knock-knee, and obstinate equinus. Accordingly, on October 28, 1890, the astragalus and a portion of the cuboid were removed from the right foot, and the same operation was performed on the left foot on January 19th of the present year. She is now walking with apparatus, but bids fair to have a good pair of limbs.

The second case was admitted on September 20, 1887, and, on January 1, 1888, chloroform was administered, when the tendo

Achillis was divided. It was subsequently treated by stretching, but the deformity recurred, and on November 7, 1890, the greater part of the astragalus was removed. She is now doing well.

Dr. PHELPS congratulated Dr. GIBNEY on the very excellent results which he had obtained, and remarked that they seemed to demonstrate the superiority of this method of treatment by the removal of the astragalus.

CLUB-FOOT.

Dr. GIBNEY also presented a case of club-foot, remarking that he never felt sure of having thoroughly relieved the deformity until a condition of marked calcaneus had been secured before the patient was discharged from the hospital.

Dr. SHAFFER said that hyperextension *immediately* after the operation of tenotomy was not unattended by risk, for one case of severe equino-varus which he had treated in this way, resulted in an elongated tendon.

Dr. R. H. SAYRE said that he had called attention in a previous paper to the fact that it was not wise to put the foot in a position of complete extension, because it is likely to result in too long an attachment between the calf muscles and the foot. The best position was at right angles to the long axis of the tibia. Non-union was most commonly due to the bandages being applied so tightly that the space between the divided tendon is occluded. If this fault in dressing be avoided, there is always a sufficient bond of union, even though the space be three inches long, as it was in a case which he had already exhibited to the Section.

Dr. PHELPS said he agreed thoroughly with Dr. Gibney as to the advantages of immediate hyperextension. It was the subsequent use of traction machines that pulled out the tendons into thin bands. The space between the divided ends of the tendon is immaterial, so long as the operation be performed antiseptically, and the dressings carefully applied. He had practised over-correction in 161 cases of open incision, and in not a single instance did the tendo Achillis fail to unite.

A CASE OF NEUROMIMESIS.

Dr. W. R. TOWNSEND presented such a case. A girl, fourteen years of age, having a good family history, fell on the 27th of last January, twisting her foot, and producing a slight excoriation on the ankle. She was taken to a hospital, where the injury was

treated by plaster-of-Paris for five weeks. On removing the plaster, the foot was found to be much distorted. She then came under the speaker's care, and an examination by Dr. B. Sachs indicated that the deformity was entirely due to psychical causes. There is now a slight equinus, and the extreme contraction of the tibialis produces varus. Only slight force is required to bring the foot into the normal position, and the patient can so retain it by the power of the will, for a few moments. There had been but little improvement so far in the case, which had been treated only by the application of blisters to the lower end of the spine, and by the administration of tonics.

In answer to a question from Dr. Ridlon, Dr. Townsend said that the genitals had not been examined.

Dr. RIDLON said that he asked this question because, in a recent case, a vulvitis has seemed to be the cause of the trouble.

Dr. SHAFFER said that some time ago he had presented a somewhat similar deformity of the foot, but in his case there was a rhythmical action of the muscles of the thigh.

Dr. H. L. TAYLOR thought the diagnosis was unquestionably correct. Some years ago he had had a very similar case, which began with a slight sprain, and which completely cured in about one month.

Dr. R. H. SAYRE called attention to the remarkable resemblance which this purely muscular deformity bore to that seen in cases which are considered to be incurable except by the removal of considerable portions of bone. In this case, the bony prominences are marked, and yet the bones are not luxated.

Dr. H. W. BERG spoke of the possible medico-legal interest that might attach to such cases.

INFANTILE HERNIA.

Dr. CHARLES N. D. JONES, of Brooklyn, presented a child upon whom he had operated for infantile hernia. When the child was about three months old, a swelling appeared in his left groin, and gradually extended downward, until it finally reached the scrotum. The mother noticed that the swelling increased along the course of the inguinal canal, when the child made any violent effort which brought into play the diaphragm or abdominal muscles. Some weeks later, the child was fitted with a truss, but the instrument did not prevent the reappearance of the swelling in the scrotum.

In this case, as persistent efforts during the past year had failed to retain the hernia in situ, it was decided to close the canal by operative measures. The operation was done on December 20, 1890. After a thorough cleansing of the field of operation, the patient was anesthetised, the bowel reduced within the abdomen, and an incision made sufficiently large to expose the external abdominal ring. After the preliminary incision, the operator had found, contrary to his expectation, that the sac was distinct from the tunica vaginalis. It was carefully separated from the testicle and cord, and then opened transversely about an inch above the distal extremity. After a careful exploration to see that there were no adhesions, the sac was ligatured with catgut, and removed. The pillars of the ring were then brought together with catgut sutures, leaving sufficient space for the passage of the cord. The wound was packed with iodoform gauze, and treated by the open method. Convalescence was afebrile. The child, who was three years of age, was presented to the Section. The wound was firmly closed, and there was no tendency to a recurrence of the hernia. A tight phimosis was operated upon at the same time as the hernia.

DOUBLE SUPRA-CONDYLOID OSTEOTOMY OF THE FEMURS.

Dr. JONES also presented a boy, six years of age, who was admitted to the Children's Hospital on September 10, 1890. He had a rachitic history, and all the bones presented rachitic deformity. The teeth were deficient, and the femora presented anterior and lateral curvatures, with great depression of the internal condyles. Below the knee, in both legs, there was a marked anterior and inward angular deformity of both bones of the leg.

On October 21, 1890, he performed supra-condyloid osteotomy of both femora. The wounds were dressed antiseptically, put up in plaster splints, and suspended by weights and pulleys, as recommended in an article published in the *Annals of Surgery*, April, 1889. On November 15th, he performed cuneiform osteotomy on the tibia and fibula of both legs for the correction of the principal deformity. The wounds were dressed according to the method recommended by Von Bergmann—viz., they were thoroughly packed with iodoform gauze, dressed antiseptically, and left until the following day, when, all hemorrhage having ceased, the bones were united with catgut sutures, the periosteum and the skin wounds sutured, and the limb enveloped in a mass of sublimate

gauze. Plaster bandages and suspension were then applied as before. Recovery was uninterrupted. On January 9th, an additional section of the bones of both legs was made to correct a slight remaining deformity, and the same after-treatment was adopted. The patient presented a very tight and adherent prepuce, which was a constant source of irritation to him. At the first operation he was circumcised. This apparently slight operation the speaker considered important, as he had found it necessary to perform it in the case of every deformity in a male child which had come under his observation.

THE PLACE OF FIXATION IN THE TRACTION TREATMENT OF HIP DISEASE.

This was the title of a paper by Dr. Robert W. Lovett, of Boston, who illustrated his remarks by the exhibition of apparatus. He said that it was a question for those who believe in the traction treatment of hip disease, to consider whether apparatus should have as its object simply traction, or fixation of the joint as well. This question presents itself under two aspects :

(a) As to the advisability of using, in certain cases, a splint which should give better fixation than the long traction splint; and (b) the indications for fixation in bed, and the class of cases in which it is necessary.

The long traction splint was introduced under the impression that it was an appliance which should give motion without friction. Later, traction in itself came to be regarded as a means of fixation, and Dr. Judson was the upholder of the view that traction furnished fixation to the hip-joint. Some experiments by the writer tended to prove that the long traction splint was not a fixation appliance, and one worn by a boy with normal hip-joints, allowed motion of 35° in walking and sitting. The practical question arises, whether such a splint furnished enough fixation, or whether in certain cases more perfect fixation of the joint is not to be desired. Certain cases do badly under treatment by the long traction splint, and these seem to be of two sorts,—very severe cases; and cases where the patients are under imperfect control, and run and play continually, producing traumatism of the joint, which results in sensitiveness, irritability, and malposition.

In the hope of preventing this condition in such cases, a splint was shown which was practically a combination of the Taylor and Thomas splint. The appliance fixes the thorax, the pelvis, and the leg, and comes below the foot, ending in a traction appliance, in this

way fixing the hip-joints as perfectly as possible, and at the same time making traction upon the diseased limb. The writer would advocate the use of such a splint chiefly in hospital practice, in very severe cases, and in patients under imperfect parental control. Practical experience has shown the splint to be useful in this class of cases.

(b) With regard to the second division of the subject—fixation in bed—the experience of the Boston Children's Hospital has been, that the immediate treatment of malposition or joint sensitiveness results in a very small proportion of abscesses among the cases treated. Of 183 cases admitted in the last three years, 107 were sent to the wards on account of deformity and sensitiveness, and only 52 for abscess. In these years, the percentage of cases admitted for deformity and sensitiveness has steadily increased, while the percentage admitted for abscesses has steadily diminished. In the last six years at the Children's Hospital, among 574 new cases of hip diseases coming in that time, only 107 abscesses have developed, giving a percentage of 18.7 per cent., which is very much less than any other series of cases reported. Of Dr. Gibney's cases, sixty per cent. had abscess; in the Clinical Society's cases, sixty-nine per cent.; and in the recent cases of Mr. Marsh, fifty per cent. It has seemed that the early admission of cases was to be regarded as the preventive treatment of abscess. It would seem, therefore, that the use of a splint affording more fixation than the ordinary traction splint was needed in severe and sensitive cases, and that rest in bed was advisable when malposition occurs, not only in order to overcome the malposition, but in the hope of preventing abscess.

DISCUSSION.

Dr. RIDLON approved of the author's observations upon the traction splint, but the outline of the splint which he had exhibited was certainly improper. During the last few years, he had not found occasion to employ more traction than was obtained by the tendency of the Thomas splint to work downward. If the splint were not supported by shoulder-straps, it gave sufficient traction for the successful treatment of fracture of the upper part of the thigh bone. He questioned very much the advisability of allowing the patient to walk around, who had sufficient muscular spasm to indicate the necessity for the application of a special traction apparatus.

Dr. SHAFFER thought that the author's experiments to determine the amount of motion occurring at the joint were fallacious, as they did not take into account the considerable arc of motion produced by the flexibility of the lumbar spine. He thought that his own experiments upon this point had not yet been contradicted. In these, he applied the apparatus to a healthy hip-joint on a person whose opposite joint was ankylosed. A person with an ankylosed hip can walk, or even dance, owing to the flexibility of the neighboring parts.

Dr. JUDSON thought that the traction splint secured fixation, but not immobilization. He thought it was important to make this distinction. Immobilization is found in union after fracture, and in ankylosis, while fixation is produced by reflex muscular action and by traction. It is almost impossible to immobilize a joint by any application of mechanical surgery. Fixation implies a degree of mobility which allows a reduction of the deformity. When applied in a painful case, it has a wonderful effect in relieving the patient's distress, which is partly pain and partly a sleep-destroying apprehension of disturbance of the joint.

Dr. PHELPS said that as he believed that it was a cardinal principle in the treatment of all joint disease, that the affected part should be immobilized, he could not understand what the author meant by "motion within certain limits"; he saw no reason for the joint being moved at all. During the period of pain, we all agreed that rest in bed was the proper thing, and yet, if this represented the best method of treatment, why employ a splint which would not carry out this idea? More than 75 per cent. recovered without deformity. Again, if extension were the proper thing, why not counteract the action of the abductors and adductors which cause the spasm, by making use of lateral traction? He did not think the statistics about abscess collected by the author carried much weight, because, in Boston, these cases were sent to institutions at an earlier stage of the disease than they were here.

THE CHAIRMAN referred to an article by Dr. Judson, in which it was shown quite conclusively that the effect of mechanical treatment, when applied sufficiently early, was to prevent abscess, and that it even prevented the opening of many abscesses which had already formed at the time the treatment was begun. Long before the Thomas splint, or the lateral traction splint, were known here, Drs. Sayre and Davis obtained cures without deformity, by means

of the traction apparatus commonly employed, and he would not, therefore, accept the view that almost all the cases treated by this much-abused traction splint, pursued an unfavorable course, and ended in deformity.

Dr. BERG spoke in favor of the use of apparatus which did not require any elaborate fitting; for, as he said, "some braces require so much fitting that they rarely fit."

Dr. H. L. TAYLOR said that he was glad to be able to approve nearly all the points made by the author in his excellent paper. The hip-joint required some form of fixation as well as extension when acutely inflamed. In most cases, the amount of fixation afforded by the long counter-extension splint, combined with short periods of rest in bed, when necessary, was sufficient. Dr. C. Fayette Taylor had never claimed that his long splint gave positive immobilization of the hip, but the speaker was surprised at the range of motion found under its use by Dr. Lovett, and would wait for further experiment before admitting that the question of the amount of motion allowed was settled. In very bad or unruly cases in dispensary practice, the apparatus shown by Dr. Lovett would, no doubt, prove useful. The speaker would emphasize the advantage of properly-applied counter-extension in the progressive stage of hip-joint disease, in order to restore the hygiene of the joint and prevent deformity.

Dr. LOVETT said that he had used one perineal pad, instead of two, because his object had been to find the fixative power of traction, and not that of any special splint, and he thought that his experiments, as far as they had gone, were in the proper direction. With regard to the question of abscess, he should have added that 170 cases of abscess mentioned included those occurring in cases which had been admitted for a number of years past,—at least since 1880.

UPPER DORSAL KYPHOSIS.

Dr. T. HALSTED MYERS presented a specimen showing an upper dorsal kypnosis with the cord in situ. The patient had muscular weakness of the legs, and exaggerated knee-jerks only. The specimen showed that the pressure was made by the body of one vertebra, and that if a laminectomy were done, the arches of at least four vertebræ would have to be removed. It also showed that the pressure was entirely anterior, and that, therefore, as there was considerable room posteriorly, the operation would not benefit

this patient. He thought a sharp bend in the cord, even without direct external pressure, might cause vascular changes from the increased pressure on the concave side, sufficient to cause symptoms.

Dr. SAMUEL LLOYD said that in many of the cases which had been operated upon, sufficient bone had not been removed, and that this had been the difficulty with two of Kraska's cases. As a matter of fact, it had been found that the removal of the posterior portion of the spinal column—the laminæ—*did* relieve the pressure on the cord.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Special Meeting, held at Y. M. C. A. Hall, May 16, 1891.

Reported by B. H. GROVE, M. D., Secretary *pro tem*.

THE PRESIDENT, Dr. E. C. W. O'Brien, called the meeting to order, and Dr. B. H. GROVE was appointed Secretary *pro tem*.

The following-named physicians were present: Drs. Cronyn, Hopkins, Hayd, Howe, Dorland, Grosvenor, J. C. Greene, S. S. Greene, Abbott, Cary, Harvey, O'Brien, Parmenter, Howe, Pattison, Rochester, Stockton, Snow, Phelps, Coakley, Goldberg, Falk, Camehl, Hubbell, J. S. Smith, E. A. Smith, Bissell, York, Crawford, Fowler, Lothrop, W. W. Potter, Thornton, Johnson, Mulford, Lapp, McPherson, Walsh, L. P. Dayton, Bartlett, Mackey, Mynter, and Wright.

The President explained the purpose of the meeting, as follows:

REMARKS OF DR. E. C. W. O'BRIEN.

Gentlemen—You are all aware of the sad cause of our gathering here to-night, for the sorrowful tidings of Dr. Burwell's death last evening was quickly known in all portions of our city. It was melancholy news to all who knew him, but to none more so than to his medical brethren, for it is known to us all how greatly we respected him, and how well we loved him. I know that there are many here, especially among the honored elders of our profession, who will speak of him to-night as they knew him, and that all their words will be an eloquent endeavor to do justice to his memory; yet, I feel that I, also, could not be content unless I give my hearty tribute to his great personal worth. Dr. Burwell was a delightful character, making the most pleasant impression upon all with whom he came in contact. He was esteemed to an unusual degree by the people of this city, where he was in active and successful practice for almost fifty years, and he was loved by his

patients to a degree not often vouchsafed even to the most faithful and fortunate practitioner. His patients could not help loving him, for he had special traits of character which readily won their enduring affection. He was in various ways an ideal physician, though his practice was so very large, (much larger than that of most physicians, even skillful and noted ones,) and though he conducted that practice in the most quiet and unobtrusive manner, still we knew he was a constant student, even to the last weeks of his useful life, and he was abreast of modern thoughts and progress in his profession to a degree that is unusual for a man of his advanced years and busy career. And he set a noble example to his professional brethren, in fact, to all men, in the purity of his daily life. And we all know the inestimable value of such an example, especially to the younger members of our profession, as well as upon his fellow-citizens, of such a man as Dr. Burwell. His skill, his genial presence, his words of encouragement, will be missed from many a sick-room and from many a home where he has been the trusted physician, counselor and friend. He was as well known in the humble homes of the poor as in the mansions of the rich. The poor especially will never forget him. His deportment was an example. The physician, like the clergyman, comes into confidential relations in our homes; like the clergyman, he should come there with clean hands and heart. Dr. Burwell was known to us as a virtuous, christian gentleman; his mind was pure, and I believe that every word he ever uttered was fit to be spoken in a temple of our Lord.

Dr. JAMES W. PUTNAM moved that a committee of three be appointed by the Chair to draft resolutions expressive of the sense of the Society in regard to the sad event that convenes it.

Carried; and the President appointed as such committee Drs. John Cronyn, F. W. Bartlett, and John Hauenstein.

Dr. HENRY LAPP, of Clarence, reported the death of Dr. A. F. Helwig, of Swormville, and moved that a committee be appointed to report resolutions, and also one to attend the funeral.

Drs. Henry Lapp, S. S. Greene, J. B. Coakley, E. T. Dorland, and Callanan were appointed to draft resolutions, and Drs. Lapp, Martin, and Myers, of Clarence; Drs. McPherson and Simon, of Akron; Drs. Bowman and Tyler, of Alden; Drs. Trull and Carmer, of Williamsville; and Drs. Parker and Krauss, of the Erie County Almshouse, as a committee to attend the funeral.

The first appointed committee reported the following:

MEMORIAL OF DR. GEORGE N. BURWELL.

WHEREAS, In the inscrutable dispensation of Providence it is decreed that our universally esteemed brother practitioner, Dr. George

N. Burwell, has been removed from the toil and labor of his daily life, with which he was so engaged in his great desire to remove or ameliorate the ills of his suffering patients; that, like his efforts to alleviate human suffering, he himself passed away in the quietness peculiar to his placid nature. Therefore,

Resolved, That the knowledge we here have of his life be as a beacon to guide us in emulation thereof, and that our deep grief at his loss be represented as our condolence to his friends and relatives.

Resolved, That this Society attend his funeral in a body, as a testimony of his worth and its esteem.

(Signed,)

JOHN CRONYN,

F. W. BARTLETT,

JOHN HAUENSTEIN.

Dr. J. C. GREENE was glad to bear testimony to the worth of Dr. Burwell. He (Dr. Greene) came to the city when a young man, and soon thereafter met Dr. Burwell in consultation. He called to mind his many words of cheer and consolation. He was told there was plenty of room in the city for one more, and that he should try and climb to the top round. Dr. Greene always found Dr. Burwell a safe adviser, and he was never known to obtain patients by unfair means. He located in a district of the city where Dr. Burwell did faithful work. He was honest, but not ambitious.

Dr. JAMES W. PUTNAM: The position in which I am placed is a peculiar one. I looked upon Dr. Burwell as a professional father, as a counselor, and I experience in his death a personal loss. I have known him for eleven years. As I learned to know him better, I learned to reverence him more and to appreciate his worth. He did many acts of kindness and charity in a humble way. His gifts to the poor and sick he called completing the cure. He was especially kind to the young men of the profession. He had but little personal ambition, and was content to do his day's work faithfully and well. He was in touch with the modern investigations, and a constant reader of the medical journals.

Dr. H. E. HAYD: We have listened with approbation to the many eulogies of Dr. Burwell. I knew none of the older men of our profession better, or loved them more. Whenever I met him my esteem became greater. It was pleasant to consult with him, for there was never an insinuation that anything was wrong. His powers of perception and observation were good. His ripe judgment always did the physician and patient good. I have often come in close contact with him and was impressed with his lovely disposition.

To us younger men he is a fitting example. He was true to every professional obligation, and to humanity in general.

Dr. LUCIEN HOWE: There is but little new that we can say of each other. We help some to get better or worse. A professional brother passes away, and we fill up the ranks. Dr. Burwell served as a landmark. We, who have been here seventeen years and more, realize that many have gone from us. We call to mind the honorable contests of Drs. Miner, Rochester, Loomis, and Burwell. When such a man as Dr. Burwell dies, a guide-post is taken away. He had grown lusty and strong in conflict. It is noteworthy that, during a professional life of fifty years, there is cause for so much of eulogy and so little of detriment. His life abounded in acts of kindness and love, which endeared him both to members of the profession and his patients.

Dr. ROCHESTER: I learned to know Dr. Burwell intimately when he was taking care of members of my family. I have experienced his love, and in the relationship of patient to physician I want to pay my tribute of respect to his memory.

Dr. S. S. GREENE: It was often my privilege to call Dr. Burwell in consultation. He seemed like a father to me and his patients. He was held in much esteem, and the large number of us assembled this evening is an evidence of the affection entertained for him.

Dr. E. T. DORLAND: I wish to add my mite in eulogy of Dr. Burwell. My acquaintance with him dates back to my boyhood. I knew him while living at Hamburg. I can testify personally to his many acts of kindness. In fact, I owe my life to his extreme care when sick with typhoid fever. He was always solicitous for my welfare, and, every other day, would drive out to my home to visit me.

Dr. H. R. HOPKINS: It seems important that members should be free from exaggerations on such occasions as the present. I trust, therefore, the members of this Society will bear me out in my effort to speak with exactness. In the year 1860, there were giants in the profession. The training of men was different then than now. The pioneers also bring a result different from us who are pampered with all the modern conveniences of travel. There was then conflict and contests, and from these there have grown principles. I came to Buffalo early in the 'sixties, and at that time no man was more conspicuous than Dr. Burwell; no man was more

rugged or of better professional character. We associate character with certain lineaments, and the face of our departed brother was expressive of love and sympathy. Dr. Burwell manifested remarkable industry, and while attending physician at the hospital would frequently visit the institution before breakfast. He was devoted to his profession, and was incorruptible. His life was an example of modesty and manliness, and was replete with professional acts of kindness.

Dr. A. R. WRIGHT: I followed Dr. Burwell's clinic years ago, and found him a careful man in his observations. There was nothing done in a careless manner, and his opinions were good and reliable. Dr. Burwell had just returned from Europe, and was considered an adept. As a pathologist, he was correct and able. Although not a member of this Society, I am pleased to bear this slight tribute to the memory of our departed friend, and thank you for this opportunity.

Dr. F. W. BARTLETT: I lived ten years next door to Dr. Burwell. I can bear testimony to his noble character. He possessed an unusual amount of industry and the happy faculty of attaching himself to his patients. He was faithful to the last degree, and there was a depth of affection in his heart. He was amiable in character, and free from vain ambition. He was faithful, day in and day out, and worthy of great emulation. Let us cherish his memory.

Dr. HERMAN MYNTER: We all knew Dr. Burwell to love him, and we trusted him implicitly. In typhoid fever or pneumonia, we would have called him in as our adviser. He was a man of the best repute, and a type for honorable professional conduct.

Dr. JOHN CRONYN: I speak upon this subject of Dr. Burwell's death with feelings full of grief. We were the warmest of friends. No one knew him better than myself, and I always found him a thorough gentleman. The men I knew forty years ago are dropping away. Drs. Flint, White, Rochester, Loomis, and now Dr. Burwell, have passed away. They were giants in the profession. We used to hear lucid discussions from these gentlemen on medical subjects; and now, of all the men that used to meet for conference on South Division street years ago, I am the only one left, excepting, possibly, Dr. John Hauenstein.

Dr. CHARLES CARY: Dr. Burwell was known thoroughly to the profession. I have known him from childhood, and our relation-

ship has been intimate. He was a keen observer and a hard student. When a boy my father assured me that the life of Dr. Burwell was worthy of emulation. I have watched him, and I have seen the truth demonstrated. He never treasured ill-feeling against any one; neither did there exist in his soul any ill-will against the Buffalo Medical University. He was, in fact, the first charter subscriber to the college fund.

Dr. J. B. COAKLEY: Our departed brother practitioner possessed a splendid character, and his bearing towards the profession was noble. I learned to know him ten years ago when I came to the city. He called upon me and gave evidence of his patriotism and largeness of heart. He possessed ability as a leader, but was inclined to be quiet and unassuming.

Dr. W. T. CALLANAN: In referring to the death of Dr. Burwell and the eulogies which have been expressed this evening, it has occurred to me that a record of the lives of the most prominent members of this Society should be preserved among the archives of this Society.

Dr. S. W. WETMORE sent a letter of regret at his unavoidable absence, in which he also paid tribute to the memory of Dr. Burwell.

The second committee reported the following:

MEMORIAL OF DR. A. F. HELWIG.

This Society having heard of the all too early death of Dr. A. F. Helwig, of Swormville, records its profound sorrow in learning of the decease of this very promising member. He was an industrious student, a faithful practitioner, ever ready to attend the poor. He was a true Christian, and this Association deeply deplores his loss.

We extend to his wife and family our profound sympathy in this sad hour.

(Signed.)	HENRY LAPP.	S. S. GREENE.
	J. B. COAKLEY.	E. T. DORLAND.
	W. C. CALLANAN.	

On motion of Dr. Cary, the Society then adjourned.

STATED MEETING.

Reported by ELI H. LONG, M. D., Secretary.

REGULAR semi-annual meeting held at the lecture hall of the Y. M. C. A., West Mohawk Street, June 9, 1891.

The Vice-President, Dr. W. H. GAIL, of East Aurora, in the chair.

The minutes of the last annual meeting were read, and after debate in an unsuccessful attempt to amend, were adopted as read.

The minutes of the special meetings, held March 20th and May 16th, were adopted.

The Committee on Membership recommended the admission of the following-named physicians: R. L. Patteson, Walter J. Riehl, Earl G. Danser, William Dowlman, H. S. Townsend, Wm. P. Clothier, Jno. J. McCullough, John Honsberger, Edson H. Young, Wm. H. Chace, C. R. Jennings, J. F. Sell, M. J. O'Connell, J. P. Wilson, and Wm. H. Woodbury. Upon motion they were elected to membership and those present were introduced to the Society. Upon motion of Dr. HUBBELL an omission in the minutes of the last annual meeting was corrected by the insertion of the name of Dr. Edwin A. Millring in the list of those elected at that meeting.

Upon motion of Dr. STORCK, the official list of members was ordered corrected by the insertion of the name of Dr. Chas. H. W. Auel, who had been regularly elected at a previous meeting.

The following-named physicians presented applications in regular form, which were referred to the committee on membership:

Harriott E. Sheldon, Fred Hamilton Powell, Charles A. Meahl, E. H. Tweedy, Charles H. Woodard, Charles P. Clark, Frank E. Hill, Lillian C. Randall, Lewis G. Smith, Andrew B. Kinsley, Irving W. Potter, Frederick Preiss, Charles J. Reynolds, John R. Gray, Arthur B. Allen, Francis L. Watkins, Charles A. Schladermundt.

REPORT OF THE BOARD OF CENSORS.

At the last annual meeting of this Society, your Board of Censors stated in its report that some of our members were supposed to be connected with certain irregular so-called medical institutes in this city, in violation of the by-laws and medical ethics of the Society, and, if sufficient proof could be obtained, charges would be prepared against them at this meeting.

The Board of Censors at its last meeting directed its chairman to prefer charges against Dr. Isaac G. Wheeler, 191 E. Eagle street, and Dr. Bernard Cohen, 336 Spring street, both members of this Society, for the violation of Sections 3, 5 and 8, of Article VII. of the By-laws of this Society, and accordingly we present the following specifications:

1. Dr. ISAAC G. WHEELER has been for some time past associated in practice and in business with two irregular and illegal practitioners,

named Horace Dewey and Ellen Crossley, who advertised and managed a "Catarrh and Dyspepsia Institute," at 133 E. Eagle, cor. Elm street, Buffalo, N. Y.; that he occupied the same office with them, prescribed and prepared medicines for their patients, and received money for giving protection by his diploma to this unlawful firm. When the Board of Censors notified them that they were practising in violation of the State medical law, and would be prosecuted, we were informed through their legal adviser that "their institute was all right, as it was managed by a regular graduate, a member of this Society." This was rather a surprise for your Board, but we were determined to find out who our member, the protector of this apparently illegal concern, was. Through the services of an efficient detective of our police department, conclusive evidence and proof was furnished that it was Dr. Isaac G. Wheeler. His associates were Horace Dewey and Mrs. Ellen Crossley, who have been since indicted by the grand jury for violating the State medical law.

2. Dr. BERNARD COHEN has been, for some time past, and is now, associated in practice and in business with an irregular practitioner, named Ferdinand Simon, 336 Spring street, who has been indicted by the grand jury for violation of the State medical law, was arraigned before the court and plead guilty of the indictment. It was ascertained that Dr. Cohen practised with Simon in the same office, and received money of him for protecting the firm with his diploma. They have now an advertisement in a German paper published in East Buffalo, of which the following is a translation: "*The Simon Medical Company, Water-Doctors, 336 Spring street. Bring your water along, and we will find out what your sickness is.*"

Your Board of Censors has notified the members accused that such charges and specifications would be preferred against them at this meeting; that they might appear before the Society to make answer and defense in their behalf.

The Board would further report that since the January meeting, five complaints against persons practising in this county in violation of the State medical law have been filed in the District Attorney's office, with full proofs and evidence of the offense for prosecution. Previous to the 27th of May last, only one case, that of Ferdinand Simon, was brought before court for trial, and, although he plead guilty to the indictment, he was not sentenced by the judge. With this result your Board could have made only a very unsatisfactory report at this meeting. The chairman, therefore, appealed to District Attorney George T. Quinby for a written statement in regard to the treatment of the other cases in his office. In answer the Board was furnished by Mr. Quinby with the following report hereto attached, which will give the Society the necessary information:

OFFICE OF THE DISTRICT ATTORNEY,
Buffalo, N. Y., May 29, 1891.

Dr. E. STORCK, Buffalo, N. Y.:

DEAR SIR—In answer to your letter of the 27th inst., in regard to cases in this office, I desire to say that all five cases presented by you for prosecution at this office were fully and fairly presented to the grand jury for their consideration. Three were indicted, and for the failure to indict the others this office cannot be held responsible; that responsibility must rest upon the grand jury. This office pressed for trial the case against Ferdinand Simon, and he plead guilty; but Judge Seaver, in the exercise of his discretion, allowed him to go upon suspended sentence. This office is not responsible for the exercise of judicial discretion on the part of Judge Seaver. Mr. Kenefick informs me that you did notify Judge Seaver that Simon was practising again, and that the Judge promised to have him brought up before him at the May Term. The first two weeks of the May Term are taken up with civil business. I have no doubt that the Simon case will be disposed of when the criminal business is taken up next Monday, June 8th. Horace Dewey was indicted, a bench warrant was issued for his arrest, but the Sheriff has been unable to find him, and the warrant is still in his hands. If you can give us or the Sheriff any information as to his whereabouts, we will have him arrested and prosecuted. In the case of Ellen Crossley, it was some time after the grand jury indicted her before she was found. Her case was moved for trial at the last Term of the Superior Court. Her attorney moved for a commission to take the testimony of a witness in Pittsburg. Judge Hatch granted the motion and a commission was issued. This necessitated a postponement of the trial, which we shall move next week if the testimony is returned.

It will thus be seen that there has been no negligence on the part of this office, and no desire to delay the prosecution of these cases.

Yours respectfully,

GEO. T. QUINBY.

One of the cases the District Attorney refers to, where the grand jury has failed to indict, and in which he places the responsibility where it belongs, is that of the Clairvoyant Doctress, Mrs. Matteson, on North Division street. Conclusive evidence and proof was presented of her guilt; it was shown that she had practised in violation of the law without license or diploma, but because one of the twenty-four men—true and conscientious—claimed that she had once cured him of rheumatism, the District Attorney failed in securing twelve votes, the requisite number of this intelligent body of men to indict! The Board also has informed Dr. Francisco Palmiere, an Italian practitioner of this city, that he was practising in violation of the law, and was subject to prosecution, as he had not registered in the County Clerk's Office. The

Board questioned the legality of his diploma that he presented at the time.

The President of the Medical Faculty of Niagara University refused to endorse it more than a year ago, for the same reason, and although the diploma is now endorsed by Dr. Charles Cary, of the Buffalo Medical College, Dr. Palmiere never had it registered. The diploma is now before the State Board of Regents, where it will receive due attention and examination.

Charges have again been made to the Board against Rud. Waldvogel, a medical student in the office of Dr. Charles Weil, for practising on his own account in violation of the law. The accused has already been before Police Court on the same complaint, and sentence was suspended on his promise to desist from practising until he had graduated. Charges will be preferred against him by this Board to the District Attorney, unless he complies with the law.

Respectfully submitted,

(Signed.)

E. STORCK,
ROLLIN L. BANTA,
HENRY LAPP,
M. B. FOLWELL,
EDWARD H. BALLOU.

The Board of Censors.

A complaint against Dr. J. M. Falk was referred to the Board of Censors for investigation.

On motion of the Chairman of the Board of Censors, seconded by Dr. Callanan, the Society proceeded to the trial of Dr. Cohen upon charges contained in the report. At this point a stranger arose and asked the privilege of the floor, to which objection was made, and the request was denied.

Dr. COHEN, being called upon to answer, stated that he took Simon's office after the latter had been ordered by Judge Seaver to discontinue practice, and that he found it necessary, in order to hold the business of his predecessor, to use his name. He, therefore, practised under the name — The F. R. Simon Medical Co., Dr. B. Cohen, attendant. He stated that according to his knowledge Mr. Simon had not been in practice since he was ordered to stop, but at present was under his preceptorship. Dr. Cohen admitted that he had placed the advertisement in the paper and was sorry for it. Upon being questioned, he stated that in the future he would practise under his own name and not advertise. In course of his defense he stated that in his relation to Simon, he had done no more than some other members who had visited patients for Simon.

He mentioned the name of one member present, who promptly denied ever having visited a patient for Simon.

A motion to expel having been offered by the Chairman of the Board of Censors, Dr. Fell advised leniency in view of this being a first offence, and he offered an amendment, substituting censure for expulsion; but a point raised by Dr. Storck that the vote must be either for expulsion or acquittal, was sustained by the Chair.

Dr. ABBOTT here raised the point whether a member in arrears was entitled to introduce a resolution. The chair ruled that he was not. A ballot was then ordered, Drs. Phelps and Fell acting as tellers.

The ballot resulted as follows: For expulsion, 51; for acquittal, 12; blank, 1. Dr. Cohen was declared expelled from the Society.

While the above vote was being counted, Dr. Crego asked unanimous consent to introduce a matter from the committee appointed to arrange entertainment for the members of the Central New York Medical Association. He stated that the committee had solicited subscriptions to meet the expenses of entertainment, but there still remained a deficit of nearly \$20. It was moved and carried that the Treasurer be authorized to pay an amount not to exceed \$20 to meet the deficit.

Dr. HOWE asked the privilege of placing a patient upon exhibition, which was granted. Upon motion of Dr. Callanan, seconded by Dr. Crego, it was voted that at the next annual meeting, two sessions be held, and the appointment of a committee of five to arrange a literary programme was authorized. The Chair appointed as such committee: Drs. F. S. Crego, W. C. Callanan, DeLancey Rochester, Edward Clark, and A. E. Persons.

The question was asked whether a member can resign from the Society.

The Chair called upon Dr. Storck to answer, who, with full reference to the by-laws, stated that a member could not resign.

Dr. STORCK moved that when the Society adjourns it be to meet at 3.30 P. M. Carried.

The Society then adjourned.

AFTERNOON SESSION.

A quorum being assembled at 3.45 P. M., the meeting was called to order by Vice-President Gail.

In continuance of the consideration of matters presented in the Censors' report, the Chairman of the Board moved that Dr. Isaac

G. Wheeler be expelled from the Society ; seconded by Dr. Ira C. Brown.

Dr. WHEELER having been invited to present his defense, stated that he desired to face the Society and state the facts in truth and candor. Something more than a year ago a man named Dewey called to ask him to take charge of an establishment, wishing to employ his name and services. He refused to accept the offer. At a second visit Dewey asked what arrangements he would consent to, when he told him that if he could be unrestricted in the care of patients he would consent to take charge, but that he would neither advise nor associate with him professionally, nor would he, under any circumstances, be a party to fraud or imposition of any kind.

The necessity of making this defense was a humiliation to him, but he felt that his course was to abide by the decision of the Society.

Several questions asked Dr. Wheeler brought out the facts that he had been employed on a regular salary, receiving no fees, and that he held no consultations with Dewey ; further, that his connection with the concern had entirely ceased.

A ballot was ordered, Drs. Dorland and C. A. Ring acting as tellers. Drs. A. Dagenais, C. E. Ernest, R. L. Patteson, A. L. Benedict and H. D. Ingraham, by vote of the Society, were excused from voting, as they arrived too late to learn the facts in the case. The result was as follows : For acquittal, twenty-two ; for expulsion, five ; blank, one. Motion declared lost.

While pending the counting of the vote, communications were presented as follows :

From the Secretary of the Medical Society of the State of New York, containing announcements in reference to the Transactions of the Society for 1891, offering back volumes of the Transactions which may be needed to complete the file of the County Society, and announcing chairman of Prize-Essay Committee, with conditions of competition. The communication was received.

A letter from the Secretary of the Eighth District Dental Society, enclosing the following preamble and resolution adopted by that body :

Whereas, Having observed that certain men who practise dentistry by the methods of quackery may secure recommendation for professional proficiency, for publication over the names of well-known members of the medical profession ;

Therefore, We, of the dental profession, members of the Eighth

District Dental Society of the State of New York, in regular convention assembled, have

RESOLVED, That, in our opinion, it is not in accordance with the usually accepted code of ethics for any professional man to furnish, for publication, certificates extolling or vouching for the professional qualifications of any other professional man, thereby perhaps bringing upon others a professional scandal.

We desire most respectfully to call the attention of physicians to this matter.

The communication was received and placed on file.

The resignation of Dr. Cohen from membership was read, and laid on the table. Under Miscellaneous Business it was moved and carried that the treasurer be authorized to pay the Board of Censors \$25.00 for expenses incurred. Dr. C. A. Ring moved that a committee to consist of Drs. A. L. Benedict, Ira C. Brown and W. C. Callanan be appointed to report at the next annual meeting upon the use of the Metric System in Prescription Writing by the General Practitioner. Carried.

Dr. STORCK presented the following amendment to the by-laws, to be acted upon at the next regular meeting, under the rules:

To amend Sec. 3, Art. VII., of the By-Laws, by adding after the word "both" on the third last line the following:

Or with any practitioner who does not become a member of a legal medical society of the county or state after practising in this county six months, or with any one who has been expelled from any such society.

Any member of the society who is found guilty of violating this section, or of gross unprofessional conduct in violation of the Code of Medical Ethics, after due investigation of the charges by the Board of Censors, and after such specified charges shall have been submitted to the society at any regular or special meeting, and due notice has been served upon the accused by the chairman of the board, to appear before the society in defense — shall be expelled from the society upon a vote of a majority of the members present.

Specific charges in writing, by Dr. C. H. W. Auel, against Dr. D. W. Harrington, for professional misconduct and violation of the Code of Ethics, were presented and read. Upon motion they were referred to the Board of Censors.

In view of the above charges, and for the purpose of having an early consideration of the same, it was moved and carried that when the Society adjourned, it be to meet July 7th, at 8.15 p. m. The Society then adjourned.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Reported by W. S. RENNER, M. D., Secretary.

REGULAR meeting, held May 5, 1891.

The President, Dr. W. C. PHELPS, in the chair.

Dr. JOHN PARMENTER read a paper entitled, Subclavicular Dislocation of the Humerus — Open Arthrotomy — Recovery. Vide page 705 this Journal.

DISCUSSION.

Dr. W. C. PHELPS had never seen open arthrotomy performed for this condition; he had never gone beyond extension (pulleys etc). But few cases of the operation had been reported, because the indications for the operation seldom arise. He had once reduced a subclavicular dislocation of the humerus by placing the patient on his back and extending both arms above his head, while he kept his (the operator's) feet on the patient's shoulders; considerable paralysis of the deltoid followed the reduction in this case, and was still present when the patient was last seen, a year and a half after the operation.

Dr. HAYD asked Dr. Phelps if he had used chloroform to reduce the dislocation of which he had spoken.

Dr. PHELPS replied that he always employed chloroform to reduce dislocations.

Dr. PARMENTER claimed that the cases of which he had spoken in his paper, could not be reduced by any other method.

REPORTS OF PREVAILING DISEASES.

Dr. ROCHESTER had seen three cases of membranous tonsillitis, which he did not consider diphtheritic; temperature, 100; membrane disappeared under mild local treatment.

Dr. BARTLETT spoke of the masking effect of La Grippe on other diseases. He described a condition which he styled "Grippe tongue." He had seen no diphtheria and very little croup during the past Winter.

Dr. GOLTRA had also seen some cases of membranous tonsillitis; he did not consider the disease contagious; he had also seen what was to him a peculiar condition of the conjunctiva, characterized by hyperemia, and peculiar spots; it seemed to be contagious. He had never seen the condition before; it disappeared under mild treatment.

Dr. GRANT had had under his care several cases of the disease of the eye, of which Dr. Goltra had spoken ; it is known as pink-eye, or acute conjunctival catarrh ; he treated his cases with mild astringents and antiseptics. The spots of which Dr. Goltra had spoken were probably marginal phlyctenulæ.

Dr. PARMENTER had also noted the rarity of diphtheria during the past Winter.

Dr. E. H. LONG asked Dr. Rochester how he distinguished the various membranous diseases from each other.

Dr. ROCHESTER stated that he distinguished the form of which he had spoken from diphtheria, by the appearance of the membrane and the slight amount of constitutional disturbance. He had seen considerable spasmodic croup during the past Winter, but no diphtheria ; he had also seen considerable congestive nephritis in connection with Grippe.

Dr. HAYD had found little good resulting from administering medicine in Grippe, especially in the bronchitis of that disease ; had found the best results followed keeping the patient in the house and administering small doses of codeia.

Dr. ROCHESTER had noted the same peculiarity as Dr. Hayd ; in these cases he had found albumin in the urine ; such cases he had placed on distilled or Bethesda water, and insisted on these remaining in the house until their tongues were perfectly clean.

Dr. F. H. POTTER had found that the sequelæ of Grippe were usually one of the following two conditions, viz., otitis media or laryngitis, extending to the trachea and lower bronchi, accompanied by considerable cough. He held that the membranous conditions found in the throat were more or less allied.

Dr. PARMENTER had reasons for having great confidence in ten-gr. doses of oxalate of cerium as a remedy in chronic dry coughs, and he thought it might be beneficial in the cases of which Dr. Hayd had spoken.

Dr. PHELPS had recently seen a case of simple follicular tonsillitis, with no fever, which was reported to the Board of Health as a case of diphtheria.

KOCH ON HIS MUSCLE.—It is announced that Professor Koch is preparing a reply to all the criticisms that have been made on his method. Professor Virchow's objections are to be dealt with in detail.—*St. Louis Med. and Surg. Journal*. Perhaps Professor Senn will also receive some attention.

Selections.

SOME EXPERIMENTAL AND CLINICAL OBSERVATIONS UPON THE THERAPEUTICAL VALUE OF SALICYLBROMANILID.

By C. S. BRADFUTE, M. D.,

Demonstrator of Therapeutics, Jefferson Medical College, Philadelphia.

AMONG the new remedies lately introduced from Germany is one from Radlauer's laboratory, a synthetical compound, to which he has given the name "antinervin," or, with a view of indicating its chemical composition, salicylbromanilid. The former is its proprietary title. It is a combination of bromacetanilid and salicylanilid, and is claimed to possess the virtues of antifebrin, bromine and salicylic acid, without their unpleasant effects, and is, consequently, an antipyretic, an antineuralgic, and an antinervine. It is a white, crystalline powder, having a rather pleasant, slightly acid taste, feebly soluble in cold water, but dissolves freely in hot water, alcohol or ether. The dose is from three to ten grains, and is best given in the form of compressed tablets or in simple powders. The writer takes the liberty of suggesting that its chemical name be abbreviated, as it seems unnecessarily long; it could be easily called "salbromalid," which would accomplish the object of brevity, and, at the same time, sufficiently indicate the chemical nature of the compound.

A glance at the physiological action of the three agents comprising salicylbromanilid, shows that they are essentially circulatory depressants. Salicylic acid acts directly on the heart muscle, lessening its electro-contractility, and, when administered in toxic doses, causing the organ to stop in diastole. After a preliminary period of stimulation, it depresses the vaso-motor centers. Antifebrin acts very similarly, though its effect upon the heart and vessels is more powerful, producing a rapid fall in the blood-pressure and a weak, irregular heart. Bromine, in addition to its impression upon the heart and vaso-motor nervous system, lowers the vital activity of the centers in the *medulla oblongata*, and interferes with the function of conscious cerebration in a way not yet clearly understood.

It can thus be seen that a compound made up of these three substances, when given in full physiological doses, would probably

exhibit an action upon the system manifested by a profound interference with the motor mechanism of the circulatory apparatus, and that whatever therapeutical value could be attached to it from a pharmacological standpoint, would depend upon this action.

In a series of experiments conducted in the therapeutical laboratory in the Jefferson Medical College, the writer's observations were confirmatory of the above remarks. He found antinervin a profound depressant of the circulation, and a prompt antipyretic. Three grains injected into the lymph sac of a medium-sized frog produced death in one hour without convulsions, the animal becoming languid and indifferent to mild stimulation after the lapse of ten minutes, and passing rapidly into stupor, finally died in a condition of coma with the muscular system completely relaxed. The reflexes gradually diminished during the course of the poisoning and were totally absent eight minutes before the cessation of the circulation.

A similar quantity was injected into a frog so prepared that the movements of the heart could be observed *in situ* and the capillary circulation watched under the microscope. The cardiac cycle was observed to gradually and uniformly become longer, the contractions lessened in vigor, the ventricles contracted more slowly than the auricles, reacting lazily to an electric current, and finally the heart stopped in diastole, spreading out like mush when removed from the body and placed upon a glass plate. The capillaries dilated, slowly and irregularly at first, but fifteen minutes before death relaxed entirely, and the blood current diminished in rapidity in proportion to the capillary paresis and the cardiac depression, the corpuscles tumbling along against each other and showing a tendency to adhere to the vessel wall. Death occurred in forty-six minutes.

The behavior of the heart in the above experiment indicated the poisonous effect of the drug directly upon the organ, but, in order to prove this, the heart of a healthy batrachian was taken out of the body and placed in a Kronecker-Bowditch apparatus. Here, removed from the influence of the central nervous system, a solution of antinervin was permitted to flow, by means of a perfusion canula introduced into the ventricle, slowly through the heart, and the results observed were the same as those noted when the heart was *in situ*. A control experiment eliminated any undue influences upon the heart from the damage it sustained in placing it in the apparatus.

Upon the rabbit the drug acts very much the same as upon the cold-blooded animal, and its influence over the respiratory movements, which is more distinct in warm-blooded animals, shows the part played by the salicylic acid in the general result. Respiration became rapid, weak, shallow, and stopped before the heart, the latter becoming slower and more feeble, and finally, a few minutes before the circulation ceased, would make no impression upon the drum of a cardiograph.

Guided by these experiments, the writer concluded that salbromalid was best applicable to those affections characterized by functional disturbances of the circulatory system brought about by reflex impressions or too active stimulation, and acute inflammatory conditions occurring in robust subjects. In the cases that fell in his hands he found this conclusion correct, and noted favorable results, and, in some instances obtained, curative effects when other remedies had failed or acted unsatisfactorily.

The following are a few of the cases in which he employed the remedy, and, while they are not conclusive in establishing the therapeutical position of the drug, they may be accepted as indications for its administration :

CASE I. Angina pectoris. Male, aged 36 ; laborer. Has attacks of angina pectoris about twice a month. During paroxysm face is pale, extremities cold, arterial tension high, and pain so excruciating as to cause at times symptoms resembling acute mania. Ten grains of salbromalid caused relief of symptoms in about twenty minutes, and three grains every two hours afterwards prevented a recurrence of the paroxysm. The results were, of course, not permanent, as the patient still has attacks as frequently as ever, but the drug never fails to check a paroxysm. The writer enjoins a caution here in administering this drug in angina pectoris. It should not be given in asthenic cases, as there must always be at hand ammonia and strychnine to combat a failure in the circulation. A thirtieth of a grain of the latter, hypodermatically, if the heart shows signs of ceasing work, is the proper dose.

CASE III. Typhoid fever, in second week. Male, aged 23 ; clerk. Temperature, 104.4° F. ; pulse, 100 ; respiration, 24. Five grains of salbromalid reduced the temperature to 102.3° F. within one hour and a half. No bad results followed.

Only one dose was administered to this case, as cold-sponging was sufficient to retain the temperature within safe limits, and it was not deemed advisable to tamper with a weak typhoid circulation.

CASE III. Brachial neuralgia of two weeks' duration. Female, aged thirty-two ; type-writer. Pain paroxysmal. Three grains of sal-

bromalid, administered every three hours, caused the pain to disappear within twelve hours. This dosage was continued four days, and afterwards a course of arsenic and diet effected a permanent cure.

This patient was robust, but of a neurotic temperament, and the neuralgic pain was evidently spasmodic in character. The following case presented the converse condition, and it will be noticed that the drug was ineffective.

CASE IV. Brachial neuralgia of three years' duration, probably rheumatic. Man, aged forty-one; engineer. In fair physical health, with a rather stolid, morose disposition. Suffers more or less continuous dull pains in left axillary and brachial regions, with occasional exacerbations. Ten grain doses of salbromalid depressed the circulation but exercised no appreciable control over the pain.

CASE V. Acute inflammatory rheumatism. Female, aged thirty-seven; cook. Temp. 104° F.; pulse 108; resp. 26. Five grains of salbromalid reduced the temperature to 103° F., and diminished the general sense of discomfort and uneasiness. It was repeated in four hours, with the result of further reducing the temperature, but, also, of markedly depressing the circulation, and it was not again administered, as the patient developed pericarditis in a severe form on the fifth day. In this case the remedy would, undoubtedly, have acted better if it had been given in smaller doses.

Radlauer claims antinervin to be anti-diabetic, but in one case of diabetes, in which the writer had an opportunity of employing it, no diminution was observed in the amount of water and sugar excreted, but, of course, one trial cannot be accepted as conclusive evidence of its inutility in this affection.

It is seen from what has been stated, that salbromalid is most effective as a pain reliever and antinervine in those functional disturbances of the circulatory system which occur at the onset of acute diseases, and in some other conditions, manifested by an overacting heart and contraction of the arterioles, which lessens the total area of blood space, and that it is most effective in robust subjects. Its power to reduce the temperature is undoubted, but owing to its action upon the heart it should be given carefully in states of hyperpyrexia, especially the low fevers.—*New England Medical Monthly*.

THE DANGER OF ADMINISTERING CHLOROFORM IN THE PRESENCE OF AN OPEN FLAME.—Phosgene (*Med. Record*), a gas exceedingly irritating to the respiratory tract, is produced by the decomposition of chloroform in the presence of an open flame. While no cases are recorded in which death could be directly traceable to this source, the question suggests itself whether it may not have been the exciting cause of fatal broncho-pneumonia in some cases after operation.—*Memphis Jour. Med. Sciences*.

Correspondence.

Dr. H. U. Williams presents a Synopsis of the last four Park-Mütter Lectures given before the Philadelphia College of Physicians.

Editors Buffalo Medical and Surgical Journal :

THE last four of the ten Mütter lectures were delivered by Dr. Roswell Park on the evening of May 12th to 15th. As in the first six lectures, of which a synopsis was given in the issue of your Journal for February last, the time was devoted to topics relating to surgical bacteriology.

After describing the most important of the surgical infectious diseases, not taken up previously, a study was made of mixed and secondary infections. Mixed infection was defined as the introduction into the organism of two different infectious elements at about the same time. Thus, discharge of pus in gonorrhea depended not only on inoculation with the specific gonococcus, but also on staphylococci. In secondary infection, although two separate infectious elements were present, a certain sequence of events was observed; and an appreciable time, from a few hours to several months, intervened between the inoculations. Example of this was found in the suppuration of a gumma, secondary infection with pyogenic cocci occurring after primary infection with the microorganisms of syphilis. Even tertiary infection was shown to be possible, for instance, where dental caries was the primary process, thus permitting the entrance of the tubercle bacillus to neighboring lymphatic glands, which later suppurred on account of the admission of strictly pyogenic bacteria.

The affections considered subsequently to the study of mixed and secondary affections were treated of chiefly in their relation to those subjects. Their various surgical sequelæ were enumerated, attention being particularly drawn to the frequency of the inflammatory diseases of the bones and joints among them.

On account of the considerable number of conditions discussed, it has not been thought expedient to attempt condensing these lectures into a brief synopsis. The printed syllabus which was provided at the hall of the College of Physicians, is given below :

LECTURE VII.—MAY 12TH.

Actinomycosis.—History. Description of the disease, and of the fungus. Actinomycosis in man. Paths of infection. *Anthrax*.—History. Sources of infection. *Bacillus anthracis*: its characteristics; intensification and diminution of its virulence. *Malignant Edema*.—Gangrenous emphysema. Description of the disease. Anatomical characteristics. Description of its bacillus; biological peculiarities. Immunity enjoyed by certain animals. *Rauschbrand*.—Symptomatic anthrax. Strong resemblance to malignant edema; essential difference. Description of its bacilli. *Glanders and Farcy*.—Brief reference to its infectious organism; the bacillus mallei. Difficulties of diagnosis.

LECTURE VIII.—MAY 13TH.

Tuberculosis.—Slowness of English and American writers to properly appreciate the matter of surgical tuberculosis. Tuberculosis of lymphatic glands; of bone; of joints; of tendon sheaths. Character of infectious granuloma everywhere the same. *Introduction to the study of mixed and secondary infections*.—Definition of the terms. Their evidences met with everywhere about the body. The most interesting effects, for the surgeon, are met with in the bones and joints. *Dysentery*. *Cholera*. *Hydatid cysts*.

LECTURE IX.—MAY 14TH.

Pneumonia. *Influenza*. *Measles*. *Scarlatina*. *Typhoid*. *Diphtheria*. *Septic angina*. *Mumps*.

LECTURE X.—MAY 15TH.

Erysipelas. *Lymphangitis*. *Variola*. *Cerebro-spinal meningitis*. *Infectious pseudo-rheumatism*. *Infectious endocarditis*. *Erythema multiforme*. *Tuberculosis Glanders*. *Anthrax*. *Syphilis*. *Gonorrhea*, the *Puerperal State*. *Other genito-urinary lesions*.
H. U. W.

The Chautauqua County Medical Society—Honors to Dr. A. Waterhouse, of Jamestown—His Microscopical Researches.

Editors Buffalo Medical and Surgical Journal:

AT THE last semi-annual meeting of the Chautauqua County Medical Society, the members of the Society were the guests of its President, Dr. A. Waterhouse, of Jamestown. It was to celebrate

forty years of active practice. The occasion was a very pleasant one to all who had the good fortune to be present.

Among the papers of the afternoon was one by Dr. Richmond, of Fredonia, who chose for his subject, *The Physician and His Microscope*. In the course of the paper, the doctor took occasion to compliment Dr. Waterhouse on account of some of his achievements with the instrument, showing what a veteran he is in microscopical research; how he has made from one hundred to two hundred measurements of the red blood corpuscles of over seventy different mammalia; how the largest and smallest calibers were recorded, and the mean diameter was found by adding all the measurements together and dividing; how his collection of parasites alone will occupy an evening with the microscope, cursorily examined,—to say nothing of his histological, pathological, and miscellaneous collections.

The privilege of entertaining our friends at our fortieth anniversary of practice will not be granted many of us. Should it be, however, it is to be hoped that we shall have a record of time as well spent.

June, 1891.

THE NEW YORK PHYSICIANS' MUTUAL AID ASSOCIATION has made a splendid showing of economy and increase in membership during the past year. Its annual report merits careful examination by all the members, and others interested in the good work of the Association. Under the presidency of Dr. Daniel Lewis, this great charity may well feel proud of its record, and promises to increase its efficiency to a still greater degree. The secretary, Dr. Robert Campbell, who has kept the finances in such excellent condition, may be addressed at 1311 Broadway, care Philip Schmidt, by all who desire information in regard to the Association.

P. BLAKISTON, SON & Co., the Medical Publishers of Philadelphia, announce for early publication, *A Hand-book of Local Therapeutics*, being a practical description of all those agents used in the local treatment of disease, such as Ointments, Plasters, Powders, Lotions, Inhalations, Suppositories, Bougies, Tampons, etc., and the proper methods of preparing and applying them. The work will form a compact volume of about 400 pages, arranged in a manner to facilitate reference, and containing, besides the usual index, a complete index of diseases, that will greatly enhance its usefulness.

BUFFALO MEDICAL AND SURGICAL JOURNAL

A MONTHLY REVIEW OF MEDICINE AND SURGERY.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business character, should be addressed
to the editors : 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXX.

JULY, 1891.

No. 12.

Editorial.

VOLUME XXX.—OMEGA.

WITH this number, the thirtieth volume of this magazine reaches its end. We hope our readers are satisfied with the results that the year has attained. They certainly have cost us much labor, and if our patrons accord us their approbation, we shall feel fully and amply compensated for it all. Our Associate Staff has been of valuable assistance to us in the work of the year, and we here and now express to them, each and all, our cordial thanks.

The index which accompanies the number will be found a valuable reference list, and especially convenient for those who bind the JOURNAL.

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE.

It will be observed, by reference to another column, that this Society held an important meeting in the early days of June. The matters of greatest interest grouped around the report of the Board of Censors, which led to the expulsion of one of the members, to the acquittal of one, and to receiving charges in another case.

The JOURNAL regrets that any member of the profession should bring himself within the range of censure in the conduct of his professional duties, but it is difficult to see how the Society could have disposed of this delicate business in a more just and generous way than it did. The time appears to have arrived when young men must be taught that they assume some other obligations than

merely the earning of their maintenance when they enter the ranks of medicine ; so, too, must men coming into our land from foreign shores, because it will not answer for them to act on the principle that a man has a right to trifle with human health or life in any manner he chooses. There are laws in existence in this State governing the practice of medicine which must be adhered to by every person entering this field, and when these are violated, it must be understood that retribution will, sooner or later, overtake the offender.

There is a disposition manifest among certain young men to seek entrance into the ranks of medicine by the shortest and easiest route. Some of these have banded themselves together recently, and obtained a modification of the Medical Examiner's Law passed last year. They seem to regard this as a triumph, and to feel that they have outgeneraled some of the older and wiser members of the profession, who were interested in elevating the standard of medical education. If we mistake not, these young men have reckoned without their host, for it will be asked, by those who are competent to raise the question, of the young physicians of the classes of 1892, Have you a State License ? Fancy the humiliation of the man who must answer, "No, I have not such a license ; I entered the Temple of Medicine by the side door ; I am an 'exempt.'"

At a time when all the countries in continental Europe, when Canada, and twenty-one of our own States, are assuming supervision of the right to practice medicine, it seems to be bad taste for any man, young or old, to array himself in opposition to the march of improvement. So, too, when a physician violates the rules of a society, he must expect to receive the discipline which pertains to such conduct, and he must stand up to such discipline in a manly way. We have nothing but kind feelings towards, and kind words for, the young men who are entering or have entered medicine, and we desire to be classed among their best friends when we counsel them, that the only way open to prosperity is through the narrow path of professional rectitude, with a proper educational basis for the true enjoyment thereof.

The Chairman of the Board of Censors deserves the thanks of the Society for the able manner in which he presented the case for expulsion, and for the indefatigable manner in which he has discharged the unpleasant duties of his office for so many years.

THE INTER-CONTINENTAL AMERICAN MEDICAL CONGRESS.

It will be remembered that we referred to this proposed Medical Congress in our editorial account of the meeting of the American Medical Association in the June number. The following circular has been issued :

THE INTER-CONTINENTAL AMERICAN MEDICAL CONGRESS.

OFFICE OF THE CHAIRMAN OF THE COMMITTEE }
ON PERMANENT ORGANIZATION, }

CINCINNATI, June 6, 1891.

The Committee appointed by the American Medical Association to effect a permanent organization of the Inter-Continental American Medical Congress, met at "The Arlington," Washington, May 7, 1891. The following officers were elected : Charles A. L. Reed, M. D., Cincinnati, O., Chairman ; J. W. Carhart, M. D., Lampasas, Texas, Secretary ; I. N. Love, M. D., St. Louis, Mo., Treasurer.

On motion, the officers were appointed a special committee to draft a Constitution, and report the same at an adjourned meeting of the general committee, to be held at St. Louis, Mo., Wednesday, October 14, 1891, when the time and place of meeting of the Congress will be decided, and permanent officers elected.

CHARLES A. L. REED, M. D., *Chairman.*

J. W. CARHART, M. D., *Secretary.*

At this meeting of the Committee, which is called coincidentally with the meeting of the Mississippi Valley Medical Association, it is expected that definite plans will be discussed looking to the complete organization of the Congress. A full attendance of the Committee is desired.

UNIVERSITY OF THE STATE OF NEW YORK.—EXAMINATIONS DEPARTMENT.

THE following amendment to Chapter 507 Laws of New York, 1890, was approved by the Governor on May 4th, taking effect immediately, as Chapter 311 of the Laws of 1891 :

This act shall not apply to any student who duly matriculated in some legally incorporated medical college of the State of New York before the fifth day of June, 1890, provided that such student, within three months after the enactment of this amendment, shall file with the Secretary of the Board of Regents of the University of the State of New York, a certificate setting forth the fact of such matriculation, verified by the applicant and signed by the Secretary of the Faculty of the college at which he matriculated.

This act will exempt only such students as file the required certificate in the Regents' office on or before August 4, 1891.

CERTIFICATE.

It is hereby certified that _____ *was on* _____ *18* *duly registered*
on its official records as a fully matriculated medical student in
 _____ *(Signed)* _____ *Secretary of the Faculty.*

 State of New York
 City of _____
 County of _____

being duly sworn, says that he is the identical person referred to in the above certificate, and that all the statements therein set forth are true.

Sworn to before me _____
 this day of 1891. _____

Notary Public.

THE general addresses before the American Medical Association, at its Washington meeting in May, were of more than usual merit, and will repay careful reading.

Dr. E. L. Shurly, of Detroit, delivered the address on Medicine, choosing for his subject, The Relations of Microorganisms and Toxines to the So-called Zymotic or Infectious Diseases. It is replete with science, and will prove of great interest to general practitioners as well as specialists. It is published in full in the Journal of the Association for May 23, 1891. The address on State Medicine, by W. L. Schenck, M. D., of Topeka, Kans., will also be found in the same number, and will likewise prove profitable reading. The address on Surgery fell to the lot of Dr. Joseph M. Mathews, of Louisville, and it is prudent to assert that the selection was fortunate. Dr. Mathews is one of the most scholarly men in the profession, and combines profundity with eloquence in a most happy manner—joint accomplishments that but few possess. His subject was, Stricture of the Rectum—Its Etiology, Pathology, Symptomology, Diagnosis, and Treatment. If the surgeon desires the latest thought on this important subject, presented in a most attractive form he will surely read this paper in the Association Journal for May 9, 1891.

The appointments for 1892 are: Address on General Medicine—Dr. J. S. Cain, of Tennessee; Address on General Surgery—Dr. John B. Hamilton, of Illinois; Address on State Medicine—Dr. C. A. Lindsly, of Connecticut.

Personal.

DR. W. M. WARD, of North Collins, was elected president of the Lake Erie Medical Association at its annual meeting, held at Dayton, in April. The next meeting (quarterly) will be held in Angola, July 10 and 11, 1891.

DR. AND MRS. HERMAN MYNTER, of Buffalo, sailed on Wednesday, June 24th, for a trip through England, Denmark, and the continent, to return in the early autumn, in season for Dr. Mynter to resume his surgical teaching in the Niagara University Medical College.

SURGEON-GENERAL JOHN B. HAMILTON, U. S. Marine Hospital Service, has accepted the position of Professor of Surgery in the Rush Medical College, Chicago, Ill., recently declined by Professor Park, of this city; so that, in the future, surgery will be taught in that institution by two professors of equal rank.

DR. CARL H. VON KLEIN, formerly of Dayton, O., has removed to Cleveland, and established himself at 122 Euclid avenue. Dr. Von Klein has been for many years noted as a specialist in diseases of the respiratory tract, and will continue in the same line of practice in his newly-chosen home. We bespeak for him the continued confidence of the profession that his skill and experience merits.

DR. THEO. G. LEWIS having been given the management of the manufacturing department of the Buffalo Dental Supply and Manufacturing Co., has been succeeded in his practice by Dr. Frank W. Low, who for four years has been Dr. Lewis's assistant. Dr. Lewis commends Dr. Low as entirely trustworthy and competent, and trusts that former patients will continue their patronage at the old office, No. 15 Court street.

SURGEON-GENERAL WALTER WYMAN.—Dr. Jno. B. Hamilton having resigned the position of Surgeon-General in the Marine Hospital Service to accept the chair of Surgery in the Rush Medical College, of Chicago, Dr. Walter Wyman, who for a long time had been the assistant of Dr. Hamilton, was, upon the recommendation of the latter, appointed by the President to fill the vacancy.—*Memphis Medical Monthly*.

Medical College Notes.

THE Kentucky School of Medicine held its commencement exercises at Macauley's Theater, Louisville, on Thursday, June 18, 1891, at which 155 new doctors were commissioned. The success of this school, under the management of Dr. W. H. Wathen as Dean, has been almost phenomenal, 400 matriculates having registered during the college year just closed.

THE following changes in the Medical Department of Niagara University are announced: Dr. Frank H. Potter has resigned as Lecturer on Diseases of the Nose and Throat, in which department he has served most acceptably, to take a position in Buffalo Medical College. Dr. W. Scott Renner, of this city, has been appointed to succeed him. Dr. Walter D. Green, health physician of this city, has been called to succeed Dr. F. A. Harrington in the Department of Hygiene. Dr. Harry A. Wood, also of Buffalo, has been elected Lecturer on *Materia Medica*, to coöperate with Prof. Persons and with Dr. Henry C. Buswell, who has been elected Adjunct Professor of *Materia Medica* and Therapeutics. Dr. L. Bradley Dorr has been elected Adjunct Professor of General Chemistry and Physics, and Dr. William C. Krauss, Professor of Pathology. The chair of Surgery has been divided; Dr. Herman Mynter takes Operative Surgery and Clinical Surgery, and Dr. Herbert Mickle has been transferred from the chair of Anatomy to that of Professor of Principles and Practice of Surgery. Dr. Eugene A. Smith has been elected Professor of General and Descriptive Anatomy, and Dr. John D. Flagg, Professor of Surgical and Practical Anatomy. Frederick H. Mills, who has been engaged in special study at Princeton University for some time, has been appointed Demonstrator of Chemistry; Dr. Jacob S. Peterson, Clinical Assistant in Obstetrics; and Dr. Matthew J. O'Connell, Clinical Assistant in Insanity. The next course of lectures has been considerably prolonged, with the intention of omitting the Spring course. The lectures will begin Sept. 21, 1891, and close May 3, 1892. A valuable addition to the already excellent clinical facilities of the school is the Lying-in Asylum on Edward street. The obstetric privileges of senior students are thus very largely increased. This school is reported to be seriously

considering the further extension of its course to a compulsory attendance upon four annual sessions, which, if adopted, will keep it still in the advance line. This, we are informed, will not be done immediately, though we think it ought to be.

Journalistic Notes.

A MERITED ADVANCEMENT.—Dr. J. C. Culbertson, the veteran editor of the Cincinnati *Lancet-Clinic*, has accepted the invitation of the trustees to take charge of the editorial and business management of the *Journal of the American Medical Association*, and has already bid adieu to the readers of the *Lancet-Clinic*, and entered upon the discharge of the duties of his new office. We congratulate the trustees upon their wise selection of Dr. Culbertson, which we feel sure will meet the approval of the profession throughout the country, and we congratulate Dr. Culbertson upon his entrance to a larger sphere of work, which will give him greater opportunities for the exhibition of that fine editorial ability which has always characterized his conduct of the *Lancet-Clinic*.

In taking leave of the *Lancet-Clinic*, Dr. Culbertson introduces as his successors Drs. A. B. Richardson, J. C. Oliver and L. S. Colter, of whom he says: "These gentlemen are selected as associate editors, because of their peculiar fitness and ability, and it gives us great pleasure to commend them to our readers as worthy professional gentlemen."

The *Monthly* wishes them a hearty welcome.—*Memphis Medical Monthly*.

THE *Ophthalmic Record*, of Nashville, Tenn., is most welcome to our exchange list. The first issue, bearing date July, 1891, has already made its appearance, and if it maintains in the future the excellent character of its initial number, it can but succeed. It is under the editorial management of Prof. G. C. Savage, M. D., who is assisted by Dr. Geo. H. Price, who will have charge of the department of otology, laryngology and rhinology. Although, for convenience, bearing as its name, *Ophthalmic Record*, it will also give full attention to the specialties named above. The first number contains thirty-two pages of carefully prepared literature, well printed on excellent paper. It will be published monthly; subscription price, \$2.00 per annum.—*Southern Practitioner*.

Obituary.

DR. FORDYCE BARKER died at his home in New York, Saturday, May 30, 1891, of apoplexy, in the seventy-third year of his age. Dr. Barker was so thoroughly identified with the profession of medicine, and had done so much to advance its lines of scientific research and improvement, that his name had become a household word with physicians, as well as the myriads of patients that he had ministered unto so successfully. Moreover, he was eminently a man of affairs, and so he will probably be more universally missed than any other American physician.

THE death is announced of the distinguished Dr. Joseph Leidy, of Philadelphia, in the sixty-eighth year of his age, which took place April 30, 1891. Dr. Leidy was one of the most celebrated anatomists of the nineteenth century, and was in other respects a savant, of whose reputation the American profession has a right to be proud.—*Nashville Journal of Medicine and Surgery*.

Hospital Notes.

THE Buffalo State Hospital graduated its fifth class of nurses from the training school connected with that institution on Tuesday, June 16, 1891, consisting of nine women and five men. The opening of the new and spacious ward on the west side of the administration building was also celebrated at the same time. It was an interesting day, and Dr. J. B. Andrews may be well pleased with the results of his first ten years' labor as Superintendent of this splendid hospital.

THE Buffalo General Hospital Training School for Nurses held its thirteenth annual graduating exercises on Tuesday, June 23, 1891, at which nine young women were duly commissioned, and certified as competent to nurse and care for sick and suffering humanity. There is no loftier mission for young women than this, and if, perchance, it becomes a shorter route to matrimony, as it has been attempted to show is the case by some statistical fiend, what of it? All the better for the patient, all the better for the nurse. Let the next class enter!

Society Meetings.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS will hold its fourth annual meeting, at the New York Academy of Medicine, 17 West Forty-third street, in the City of New York, Thursday, Friday, and Saturday, September, 17, 18, and 19, 1891, under the presidency of Dr. Adam H. Wright, of Toronto. All physicians interested in the discussion of subjects pertaining to Abdominal Surgery, Obstetrics, and Gynecology are invited to attend without further formal notice. By order of the Executive Council.

WILLIAM WARREN POTTER, M. D.,
Secretary.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its seventeenth annual session at St. Louis, Wednesday, Thursday, and Friday, October 14, 15, and 16, 1891. A large attendance, a valuable programme, and a good time are expected. The members of the medical profession are respectfully invited to attend. C. H. Hughes, M. D., President, 500 North Jefferson avenue, St. Louis. E. S. McKee, M. D., Secretary, 57 West Seventh street, Cincinnati. I. N. Love, M. D., Chairman of the Committee of Arrangements, 301 Grand avenue, St. Louis.

THE MEDICAL SOCIETY OF THE COUNTY OF MONROE held its seventy-first annual meeting in Rochester, May 27, 1891, under the presidency of John O. Roe, M. D. There were nearly one hundred physicians present, and scientific papers were read by Doctors E. H. Howard, Marion Craig, P. D. Carpenter, E. W. Mulligan, Charles Forbes, Anna H. Searing, W. M. Hawkins, J. L. Roseboom, H. S. Durand, R. M. Moore, L. A. Weigel, F. F. Dow, W. L. Conklin, J. W. Whitbeck, A. Dann, H. T. Williams, A. W. Henckell, George W. Goler, and S. L. Elsner.

Dr. Roe chose for the subject of his presidential address, The Climatic Therapeutics of the Respiratory Organs with Special Consideration of the Climate of Western New York, which was dealt with in a masterly manner, and from the standpoint of a specialist skilled in the treatment of diseases of the respiratory tract.

Drs. E. W. Mulligan and W. J. Herriman were elected as delegates to the Medical Society of the State of New York, and Drs.

C. W. Wilbor and H. S. Durand, of Rochester, and J. W. Craig, of Churchville, were elected delegates to the American Medical Association.

Drs. F. F. Dow, E. B. Angell, and H. S. Durand were appointed a committee to consider the feasibility of establishing a medical library in Rochester. This was a model county society meeting, and it would be well for Erie county to take a lesson therefrom.

THE KENTUCKY STATE MEDICAL SOCIETY held one of the most successful meetings in its history at Lexington, May 27 and 28, 1891. Dr. McMurtry, of Louisville, made an interesting and able report on Abdominal Surgery, and Dr. Arch. Dixon, of Henderson, read a paper of great interest on The Use and Abuse of the Surgical Probe. The Society honored itself in electing Dr. H. Brown, of Hustonville, as president for the ensuing year. Dr. David Barrow, of Lexington, as chairman of the committee of arrangements, contributed largely to the success of the meeting by his excellent management of all details pertaining to his office, while the banquet was especially conspicuous for good form, elegant service, and all that goes to make such an occasion enjoyable.

THE MEDICAL SOCIETY OF THE STATE OF OHIO held its annual meeting for 1891 at Sandusky, June 17th, 18th, and 19th. The president, Dr. William J. Conklin, of Dayton, in his address, discoursed upon Moliere and the Doctors in a scholarly manner. It was a popular address to a popular audience, full of French classical research, and was received with hearty approbation, manifested in frequent applause. In an interesting discussion of the Surgical Treatment of Uterine Cancer, the hysterectomists seem to have vanquished their opponents in a handsome manner. The attendance upon the meeting was large, and the hospitality limitless.

THE CENTRAL NEW YORK MEDICAL ASSOCIATION held its twenty-fourth annual session in Buffalo, June 2, 1891. The meeting was largely attended, and under the efficient presidency of Dr. Nathan Jacobson, of Syracuse, a comprehensive and interesting programme was despatched. This was its first meeting in Buffalo, and the new constituent of the association, Erie county, gave it a hearty welcome. The following officers were elected for the ensuing year: President, Alvin A. Hubbell, M. D., Buffalo; First Vice-President

Lewis A. Weigel, M. D., Rochester ; Second Vice-President, Henry L. Elsner, M. D., Syracuse ; the Secretary, Edward B. Angell, M. D., Rochester, and Treasurer, Alfred Mercer, M. D., Syracuse, hold over.

Hereafter only one meeting will be held each year, and that, on the first Tuesday of June. The meetings will rotate between Buffalo, Syracuse and Rochester. The next one will be held in Syracuse. The association now comprises sixteen counties of central and western New York.

THE ANNUAL MEETING OF THE MEDICAL SOCIETY OF CHAUTAUQUA will be held in Mayville on the second Thursday (9th) of July, 1891, when a number of interesting papers will be read.

Book Reviews.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. Vol. III., for the year 1890. Standard 8vo. pp. xliii.—385. Illustrated with nineteen plates, two charts, and forty-six engravings. Philadelphia : William J. Dornan. 1891.

The third volume of the transactions of this active and progressive association is fully up to the high standard of its predecessors. A glance at the table of contents will indicate the scope of the work performed at its Philadelphia meeting, and is as follows :

The President's Annual Address, by Edward E. Montgomery, M. D., Philadelphia ; Some Facts Relating to the Diagnosis and Treatment of Placenta Previa, by James P. Boyd, M. D., Albany ; Adherent Placenta : its Causes and Management, by Augustus P. Clarke, M. D., Cambridge ; The Relation of Albuminuria to Puerperal Eclampsia, by William S. Gardner, M. D., Baltimore ; Tincture of Iodine in Hyperemesis Gravidarum, by Llewellyn Eliot, M. D., Washington ; The Practical Teaching of Obstetrics in the United States, by George H. Rohé, M. D., Baltimore ; The Axis-traction Forceps : its Place in Obstetrics, by Joseph Hoffman, M. D., Philadelphia ; The Vectis : a Useful, but Forgotten Instrument, by William Wotkyns Seymour, M. D., Troy ; Shortening the Round Ligaments of the Uterus (Alexander's Method), by Joseph H. Branham, M. D., Baltimore ; Ovarian and Ligamentous Cysts Co-existing in the Same Patient — Operation — Death from Shock, by William Warren Potter, M. D., Buffalo ; The Surgical Conception of Peritonitis, by Joseph Price, M. D., Philadelphia ; Some of the Difficulties met with in Abdominal Surgery, as Illustrated by Cases from Personal Records.

by A. Vander Veer, M. D., Albany ; Personal Experiences with Gallstones and the Operation for their Relief, by William Wotkyns Seymour, M. D., Troy ; The Elastic Ligature in Extra-peritoneal Treatment of the Pedicle, by X. O. Werder, M. D., Pittsburgh ; Report of a Case of Extirpation of a Calculus from the Ureter by Combined Abdominal-lumbar Section — Recovery, by Rufus B. Hall, M. D., Cincinnati ; Report of a Case of Hydatid Cyst of the Broad Ligament, by Norman Bruce Carson, M. D., St. Louis ; Report of Gynecological Cases Treated by Electricity, by Franklin Townsend, Jr., M. D., Albany ; A Discussion of Vaginal Hysterectomy, with Observations on Eleven Cases with one Death, by Charles A. L. Reed, M. D., Cincinnati ; Puerperal Fever, by Wm. H. Myers, Fort Wayne ; A Large Group of Mixed Specimens, Illustrating the Principal Complications and Varieties of Pelvic and Abdominal Surgery, by Joseph Price, M. D., Philadelphia ; Specimens of Tubal Gestation, presented by E. E. Montgomery, M. D., Philadelphia ; A New Mode of Exit for an Ovarian Cyst, by George R. Dean, Spartanburg ; Description of Photographic Plates of an Edematous Acardia, by James F. W. Ross, M. D., Toronto ; Infantile Vulvar Hemorrhage, by Thomas E. McArdle, M. D., Washington ; In What Class of Wounds Shall We Use Drainage ? by Henry O. Marcy, M. D., Boston ; The Spleen as a Factor in Gynecology : with Report of a Successful Case of Splenectomy for Dislocation into the True Pelvis, by Frank A. Glasgow, M. D., St. Louis ; Osteomalacia Acutissima of the Anterior Pelvic Wall in a Rhachitic Woman, Developing Three Months after Delivery — Castration — Recovery, by F. Winkel, M. D., Munich ; Extra-uterine Pregnancy — Laparotomy — Extraction of a Dead Child — Recovery ; and Case of Tubal Pregnancy : Death from Rupture of Tube and Internal Hemorrhage, by Julius Nicolaysen, M. D., Christiania ; Use and Abuse of the Obstetrical Forceps, by Eugene Prosper Bernardy, M. D., Philadelphia ; Some of the Causes of Pelvic Disease, by Mordecai Price, M. D., Philadelphia ; Chronic Purulent Endometritis, by John Chase Sexton, M. D., Rushville ; Three Cases of Endometritis Treated with Chloride of Zinc Pencils, by A. Cordes, M. D., Geneva, Switzerland ; Ectopic Gestation Two Etiological Inquiries, by W. A. Freund, M. D., Strassburg ; The Etiology of Menstruation, by Milo Buel Ward, M. D., Topeka ; Posterior Displacement of the Uterus — Remarks upon Pathology and Treatment, by Isaac S. Stone, M. D., Washington ; Obscure Pelvic Inflammation Following Parturition, by Walter Coles, M. D., St. Louis ; A Plea for Conservatism in the Treatment of Diseased Uterine Appendages, by Carlton C. Frederick, M. D., Buffalo ; The Treatment of Fibroid Tumors of the Womb, by Donnel Hughes, M. D., Philadelphia ; The Value of Exercise as a Therapeutic Means in the Treatment of the Pelvic Diseases of Women, by John Harvey Kellogg, M. D., Battle Creek ; Malignant Degeneration in Dermoid Cysts, by George Erety Shoemaker, M. D., Philadelphia ; The Operative Treatment of Recto-vaginal Fistula, by Dr. Max Sänger, Leipzig.

It will be observed that there is scarcely a subject that it is important to discuss at this period, in any of the departments covered by this Association, that is not here treated of, and the discussions were of the most spirited and instructive nature. Whoever would keep pace with the literature of obstetrics, gynecology, or abdominal surgery, will find it necessary to possess the annual volumes of this Association.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. By HENRY G. PIFFARD, M. D., Clinical Professor of Dermatology, University of the City of New York; Surgeon in charge of the New York Dispensary for Diseases of the Skin; Consulting Surgeon to Charity Hospital, etc., etc. Assisted by Robert M. Fuller, M. D. With fifty full-page original plates, and thirty-three illustrations in the text. Large quarto, pp. vi.—159. New York: D. Appleton & Company. London: Caxton House, Paternoster Square. 1891. Price, \$15.00.

The scope of this excellent work embraces all that belongs to practical dermatology. It is complete and comprehensive, yet so abridged and condensed as to present the essential details of diagnosis and treatment. The merits and intrinsic worth of the treatise under consideration, may be further attested to by the numerous publications of the author so familiar to the profession. He has undertaken to supply a want which shall serve as a guide to the general practitioner, with the fewest technicalities, steering clear of all theoretical and controversial discussions, and entirely ignoring the pathological histology of the skin, which he claims is still in an extremely inchoate state. However, the most notable facts regarding etiology, diagnosis and methods of treatment are concise and clearly stated, commending themselves as highly practical, and indispensable to the busy doctor.

The preliminary remarks are devoted to diagnosis, especial stress being placed upon the importance of the identification of the almost infinite variety of cutaneous affections, in order that their management and treatment may be more successful. The various diseases of the skin are then accurately described; under the heading of each, brief reference is made to etiology, differential diagnosis, and therapeutics.

Another feature of this most superb text-book and atlas is its illustrations, being eighty-three in number, which comprise fifty plates, and thirty-three minor representations. The plates are excellent specimens of photographic copies from the originals. They are all admirably executed, being reproduced from photo-

graphs taken from nature by the aid of artificial light, which the author prefers to ordinary daylight. And, in many instances, he has aimed to bring together as many of the varieties of a given disease as possible, with careful and most accurate delineation.

E. W.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By FRANK HASTINGS HAMILTON, A. B., A. M., M. D., LL. D., late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York; Consulting Surgeon to Hospital for Ruptured and Crippled, to Elizabeth's Hospital, etc.; author of a Treatise on Military Surgery and Hygiene; a Treatise on the Principles and Practice of Surgery, etc. Eighth edition, revised and edited by Stephen Smith, A. M., M. D., Professor of Clinical Surgery in the University of the City of New York, and Surgeon to Bellevue and St. Vincent's Hospitals, New York. Illustrated with 507 wood-cuts. Pp. xvi.—849. Philadelphia: Lea Brothers & Co. 1891. Price, cloth, \$5.50; sheep, \$6.50.

This classical treatise has more than ordinary interest for the medical profession of Buffalo, for in the old tenement building upon the corner of Virginia street and Pearl place, where once was the Sisters of Charity Hospital, the author gained the experience and recorded the cases which form no inconsiderable part of this admirable work.

Dr. Smith has brought the book quite up to modern standards, a task which he is peculiarly ably fitted to perform, inasmuch as he was for so long a time intimately associated with the author, first as pupil and then as colleague, and had an important share in the collection and arrangement of the materials out of which this book grew. Dr. Smith has, furthermore, made the text more compact, eliminated matter not bearing upon the case, and utilized his own large clinical experience in many instances. When a book has reached an eighth edition there remains little to say concerning it that has not already been said. The fact that it has reached an eighth edition, and has been translated into many languages, alone attests its great worth. With Dr. Smith to supervise it in the future, it cannot fail to be what it has always been, a sterling guide to the practitioner and student.

The publishers have done their part in their usual excellent way. One hundred and five new illustrations have been added.

J. P.

TRANSACTIONS OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION. Twelfth Annual Meeting, Baltimore, May 29-31, 1890. New York: D. Appleton & Co. 1891.

The annual publications of these Transactions of the Association always places in a permanent form much valuable material con-

tributed to the science of Laryngology. The present volume is no exception to the rule. We notice in it many reports of rare forms of disease, besides the usual number of general papers. The officers for 1891 are as follows: President, Dr. W. C. Glasgow, St. Louis; First Vice-President, Dr. John O. Roe, Rochester; Second Vice-President, Dr. J. H. Hartman, Baltimore; Secretary and Treasurer, Dr. Charles H. Knight, New York; Librarian, Dr. T. R. French, Brooklyn. The place of meeting will be in Washington, in connection with the Congress of Physicians and Surgeons in September.

F. H. P.

BOOK FOR ADVERTISERS. Containing lists of the best newspapers in the United States and Canada. Together with a complete list of all the Class and Trade Journals. Being a compilation from the American Newspaper Directory, with Circulation Ratings and some Advertising Rates, together with a statement of the best way to place Newspaper Advertising. Small octavo, pp. 368. 178th edition. New York: George P. Rowell & Company. 1891.

Advertising has become a science, and Messrs. Geo. P. Rowell & Co. appear to have mastered it. It is difficult to see how so much information as this book contains could be condensed into so small a compass. The preparation of an advertisement to reach the eye of the party in greatest interest, and so to economize space as to bring its cost within the range of a proper limit to the advertiser's cash-box, is to be learned in this book,—and this is the sum of the whole subject. Daily, weekly, monthly and other periodicals and journals are all classified and rated in this work. Then there are statements made as to population, value of different newspapers and journals as advertising mediums, together with a vast amount of general and special information that should be in possession of every advertiser who would proceed intelligently to seek the eye of his would-be customer. No business man, journalist, advertising agent, or politician, can afford to deny himself the possession of this book, which can be obtained by sending its price, \$1.00, to the publishers, No. 10 Spruce street, New York.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, consisting of original treatises and reproductions in English of books and monographs selected from the latest literature of foreign countries, with illustrations, etc. Published monthly, Vol. X., No. 1, April; No. 2, May; No. 3, June, 1891. New York: Wm. Wood & Co. \$10.00. \$1.00 per part.

The April number of the current volume contains the following titles: Treatment of Syphilis of the Nervous System, by Julius

Althaus, M. D.; *Railway Injuries with Special Reference to those of the Back and Nervous System in their Medico-Legal and Clinical Aspects*, by Herbert W. Page, M. A.; *Causes and Prevention of Phthisis*, by Arthur Ransome, M. D.

The May number contains: *Differentiation in Rheumatic Diseases (so-called)*, by Hugh Lane, L. R. C. P.; *Mental Affections of Childhood and Youth*, and other papers, by J. Langdon Down, M. D.; *Cure of the Morphia Habit*, by Oscar Jennings, M. D.; *Notes on the Examination of the Sputum, Vomit, Feces, and Urine*, by Sidney Coupland, M. D.

The June number embraces the following subjects: *Influenza Associated with Nervous and Mental Diseases*, by Dr. VanDeventer; *Technic of Ling's System of Manual Treatment*, by Arvid Kellgren, M. D., Edin., illustrated with seventy-nine engravings; *Antipyresis*, by Prof. Arnaldo Cantani, Naples; *Some Urinary Disorders Connected with the Bladder, Prostate, and Urethra*, by Reginald Harrison, F. R. C. S., illustrated.

The variety of the titles here given and the renown of many of the authors, will ensure a large circulation of these numbers, which the publishers continue to present with the same liberality as to quality and price as heretofore.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONER'S INDEX.

A Work of Reference for Medical Practitioners 1891. Edited by PERCY WILDE, M. D. Series of Medical Classics. E. B. Treat, publisher, 5 Cooper Union, New York. Pp. 580. Price, \$2.75.

The index to this volume contains nearly three thousand references to diseases and remedies. The literature of the year has been carefully analyzed and the practical and useful has been happily condensed, and is here presented in admirable form. Although special attention has been paid in setting forth the therapeutic side of medicine, pathology and diagnosis have not been slighted. We can scarcely conceive how any physician can do without an Annual of the progress of medicine, and we know of none better than Treat's. The corps of editors comprises representative men of the profession in America, England, France, and India. Besides the references, this volume contains some interesting and valuable articles, among which may be mentioned: "The Hand as a Diagnostic Feature in Diseases of the Nervous System," by Dr. E. L. Fox; "Methods of Testing for Errors of Refraction," by Mr. William Lang; "Recent Tests for Deafness," by Dr. J. Dundas

Grant; "The Sputa as a Means of Diagnosis," by Dr. F. J. Wethered; "The Motor-Centers of the Brain," by Mr. W. H. Elam; "The Diagnosis of Functional and Organic Diseases of the Heart," by Drs. Leaming and Jackson, of New York, and "The Diagnosis of Gastric Neurasthenia," by Dr. Dujardin-Beaumetz, of Paris.

The appearance of this book is similar to the others of this series, containing many instructive engravings, which add much to its usefulness.

W. C. K.

DIABETES: ITS CAUSES, SYMPTOMS, AND TREATMENT. By CHARLES W. PURDY, M. D., Queen's University; Honorary Fellow Royal College of Physicians and Surgeons, Kingston; Member of the College of Physicians and Surgeons of Ontario, etc. No. 8 in the Physicians' and Students' Ready Reference Series. With Clinical Illustrations. Philadelphia and London: F. A. Davis. 1890. Price, \$1.25.

The object of this work, to furnish the profession with its present status of knowledge on the subject of diabetes, is well fulfilled, and we regard it as a valuable *résumé* of this important subject for the use of the busy practitioner. Until the pathology of Diabetes is well established, and our therapeutic measures founded on a rational basis, the treatment must be empirical. The author does not aim to unravel this intricate problem, but gives the latest opinions in a style and clearness which makes his work a valuable addition to the medical library.

COSMETICS. A Treatise for Physicians and Pharmacists. By Dr. HEINRICH PASCHKIS, Docent of the University at Vienna. 8vo. pp. vi.—210. New York: William Wood & Company. 1891. Price, paper, \$1.50.

The care of the skin and complexion are no longer trusted to the ignorant, nor are they governed by superstition or tradition. In this work we have the science of Cosmetics discoursed upon, as related to the care of the skin, hair and nails, and the mouth. Much importance is now attached to soaps, as it is well known that many times the use of impure or improper soap either causes skin diseases, or keeps them alive after they have appeared. Much information of value is given in this work in regard to soaps that every person should understand. The book also contains many new and useful formulæ, and will be found a valuable treatise.

All subscribers for the *American Druggist*, new orders or renewals, can receive the above-mentioned book FREE OF ALL CHARGE by settling their subscriptions, including arrears, direct with the publishers, as follows:

January subscribers who pay to the end of December, 1891;
 July subscribers who pay to the end of June, 1892.

Those desiring the book will please mention it when remitting.

BOOKS AND PAMPHLETS RECEIVED.

Plain Talks on Electricity and Batteries, with Therapeutic Index. For General Practitioners and Students of Medicine. By Horatio R. Bigelow, M. D., Permanent Member of the American Medical Association; Fellow of the British Gynecological Association; Member of the Philadelphia Electro-Therapeutic Society, etc. 12mo, pp. vi.—85. Philadelphia: P. Blakiston, Son & Company. 1891.

Text-Book of Medical Jurisprudence and Toxicology. By John J. Reese, M. D., Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania; Late President of the Medical Jurisprudence Society of Pennsylvania; Honorary Member of the New York Academy of Anthropology; Corresponding Member of the New York Medico-Legal Society, etc. Third edition, revised and enlarged. Small octavo, pp. xvi.—666. Philadelphia: P. Blakiston, Son & Company. 1891.

Practical Points in the Management of Some of the Diseases of Children. By I. N. Love, M. D., Professor of Diseases of Children, Clinical Medicine and Hygiene in the Marion-Sims College of Medicine, St. Louis; Consulting Physician to the City Hospital, St. Louis, etc., etc. The Physicians' Leisure Library. Detroit: George S. Davis. 1891. Price, cloth, 50 cents; paper, 25 cents.

The Action, Therapeutic Value, and Use of the Carlsbad Sprudel Salt (Powder Form), and its Relation to the Carlsbad Thermal Water. By Dr. W. Jaworski, Demonstrator at the University of Krakow. Clinical experimental researches made at the University Clinic of Prof. Korczynski, in Krakow, with a Dietary by the Translator, A. L. A. Toboldt, M. D., Assistant Demonstrator of Pharmacy, University of Pennsylvania; Editor *Journal of Balneology and Medical Clippings*. 8vo, pp. viii.—100. Philadelphia: P. Blakiston, Son & Company. 1891.

Massage. A Primer for Nurses. By Sarah E. Post, M. D., Lecturer before the Training Schools for Nurses, connected with Bellevue, Mt. Sinai, St. Luke's, and Charity Hospitals, New York. Second edition, with seven original photographs. 12mo, pp. 47. New York: The Nightingale Publishing Company. 1891.

Report of Twenty-four Abdominal Operations in the Philadelphia Hospital. By E. E. Montgomery, M. D. Reprint: The Philadelphia Hospital Reports, Vol. I. 1890.

Hodgkin's and Allied Diseases. By W. H. Bergtold, M. D. Reprint: *Buffalo Medical and Surgical Journal*, April, 1891.

The Aseptic Method as Applied to Intra-Nasal Surgery. By John O. Roe, M. D., Rochester, N. Y., Fellow of the American Laryngological Association, etc. Reprint: *The Medical News*, March 28, 1891.

Stricture of the Oesophagus from Interstitial Thickening of its Walls. A Fibroid Hypertrophy. By John O. Roe, M. D., Rochester, N. Y. Reprint: *The New York Medical Journal*, March 14, 1891.

Aspiratore—iniettatore. Del Dr. Emilio Pittarelli. Reprint : Proceedings Italian Society of Internal Medicine. 1890.

Proceedings and Addresses at a Sanitary Convention, held at Alpena, Mich., July 10 and 11, 1890, under the direction of a Committee of the State Board of Health and a Committee of the Citizens of Alpena. Supplement to the Report of the Michigan State Board of Health for the Year 1890.

A Consideration of Some of the Parts of a Microscope Stand, of Interest to Pharmacists. By Dr. H. M. Whelpley, F. R. M. S. Reprint : *Popular Science News*.

The Causation of Influenza, Sometimes Called by its French Name, "La Grippe." By Henry B. Baker, M. D., Secretary Michigan State Board of Health. Reprint.

Abstract of the Proceedings of the Michigan State Board of Health. Annual Meeting, April 14, 1891. Reported by the Secretary of the Board.

Consideration of the Legal Status of Midwifery in the State of New York. By F. Park Lewis, M. D., Buffalo, N. Y. Reprint : *The North American Journal of Homeopathy*, April, 1891.

Ueber die Endergebnisse der Vaginalen Total Exstirpation wegen Carcinom an der Königlichen Frauenklinik zu Dresden. Von Eduard Leisse, Erstem Assistenten. Sonderabdruck a. d. *Archiv f. Gynäkologie*. Bd. XL., Heft 2.

Ventrofixatio uteri und Schwangerschaft. Von G. Leopold. Sonderabdruck aus dem *Centralblatt für Gynäkologie*, 1891. No. 16.

Practical Use of the Metric System. By A. L. Benedict, M. D., Buffalo, N. Y., Attending Physician Fitch Provident Dispensary. Reprint : *Medical and Surgical Reporter*, March 7, 1891.

Operative Procedures in Acute General Suppurative Peritonitis. By W. E. B. Davis, M. D., Birmingham, Ala. Read by invitation before the Medical Society of the State of New York, at Albany, February 3, 1891.

Report of the Health Officer of the Port of New York to the Commissioners of Quarantine of the State of New York. 1891. By William M. Smith, M. D., Health Officer.

A New Operation for Prolapsus of the Anterior Vaginal Wall. By Andrew F. Currier, M. D., New York. Read before the Section of Obstetrics and Diseases of Women and Children, at the Meeting of the American Association, Nashville, Tenn., May, 1890. Reprint : *Annals of Gynecology and Pediatrics*.

Treatment of the Opium-Neurosis. By Stephen Lett, M. D., Medical Superintendent of the Homewood Retreat, Guelph, Ont. Report of a paper read before the American Medical Association at Washington, May, 1891.

Sixth Annual Report of the Board of Health of the City of Newport. R. I. For the year 1890.

Resection of the Optic Nerve. By L. Webster Fox, M. D. Second paper. Reprint : *The Medical and Surgical Reporter*, May 30, 1891.

Sixth Annual Announcement and Catalogue of the Western Pennsylvania Medical College, Pittsburgh. Sessions of 1891-1892.

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